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Water Resources Data Florida Water Year 1984

Volume 4. Northwest Florida

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-84-4
Prepared in cooperation with the State of Florida
and with other agencies

CALENDAR FOR WATER YEAR 1984

1983

OCTOBER

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Water Resources Data Florida

Water Year 1984

Volume 4. Northwest Florida

by P.E. Meadows, J.B. Martin, and P.R. Mixson

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-84-4
Prepared in cooperation with the State of Florida
and with other agencies

I

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UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

Prepared in cooperation with the
State of Florida
and with other agencies as listed
under cooperation

For additional information write to
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227 North Bronough Street, Suite 3015
Tallahassee, Florida 32301

1986

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PREFACE

This volume of the annual hydrologic data report of Florida is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Florida are contained in four volumes:

Volume 1. Northeast Florida
Volume 2. South Florida
Volume 3. Southwest Florida
Volume 4. Northwest Florida

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data. This report was prepared for publication by P. R. Mixson under the supervision of M. A. Franklin, J. B. Martin and P. E. Meadows. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established quidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data.

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This report was prepared in cooperation with the State of Florida and with other agencies under the general supervision of I. H. Kantrowitz, District Chief, Florida.

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IV

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14.

15. Supplementary Notes

Prepared in cooperation with the State of Florida and other agencies.

16. Abstract (Limit: 200 words)

Water resources data for the 1984 water year in Florida consist of continuous or daily discharge for 251 streams, periodic discharge for 32 streams, miscellaneous discharge for 43 streams, continuous or daily stage for 92 streams, periodic stage for 31 streams, peak discharge for 60 streams and peak stage for 37 streams; continuous or daily elevations for 73 lakes, periodic elevations for 82 lakes; ground-water levels for 467 wells, periodic ground-water levels for 539 wells, and miscellaneous water-level measurements for 2,039 wells; quality-of-water data for 200 surface-water sites and 596 wells.

The data for northwest Florida includes continuous or daily discharge for 46 streams, periodic discharge for 7 streams, peak discharge for 19 streams and peak stage for 19 streams, and continuous or daily stage for 4 streams; continuous elevations for 5 lakes and periodic elevations for 4 lakes; continuous ground-water levels for 25 wells, periodic ground-water levels for 87 wells, and miscellaneous water-level measurements for 70 wells; quality-of-water for 27 surface-water sites and for 22 wells.

These data represent the National Water Data System records collected by the U.S. Geological Survey and cooperating local, state and federal agencies in Florida.

17. Document Analysis a. Descriptors

*Florida, *Hydrologic data, *Surface Water, *Ground Water, *Water Quality, Flow rate, Gaging Stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses, Elevations, Water wells

b. Identifiers/Open-Ended Terms

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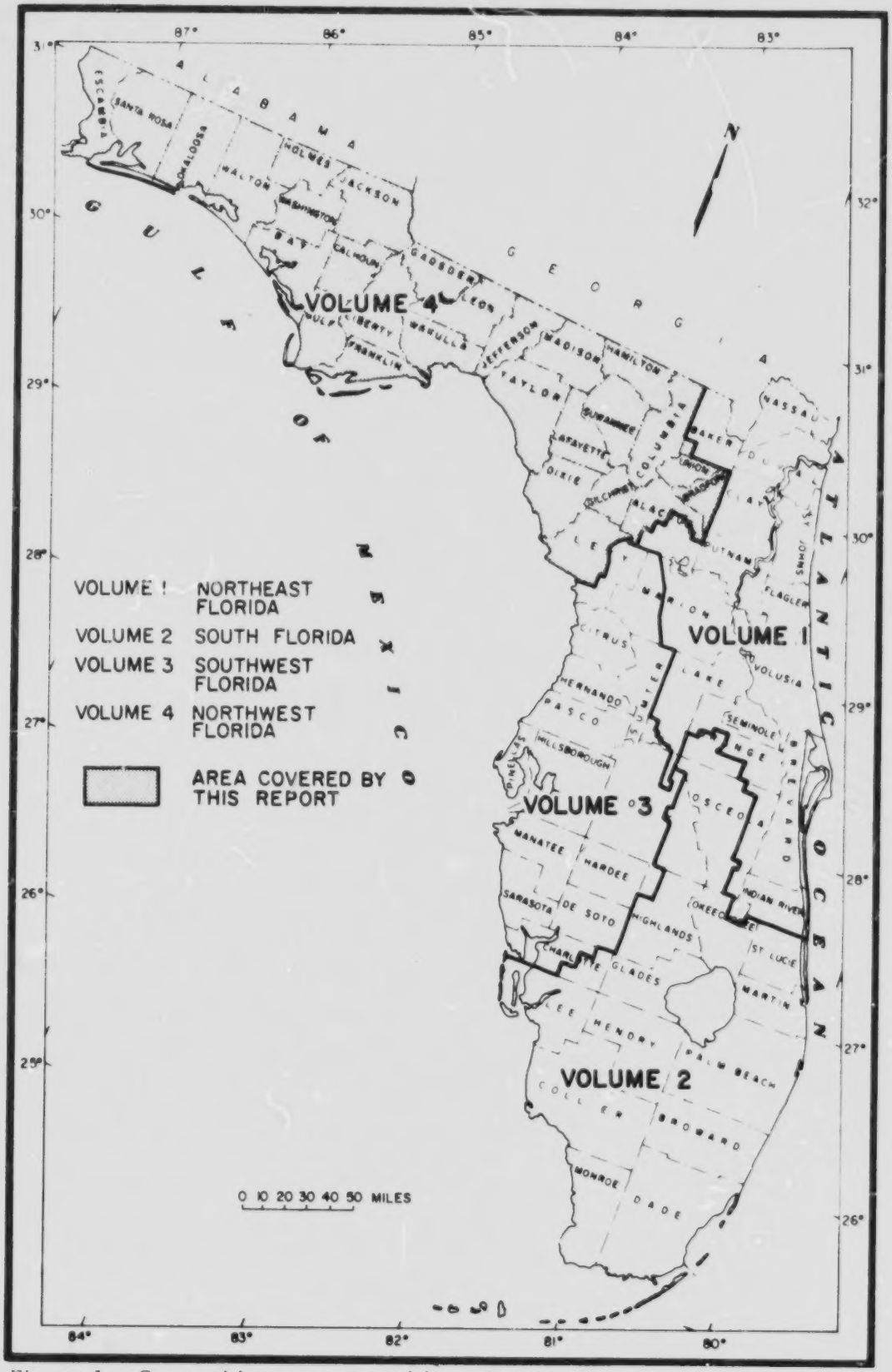

Figure 1. Geographic area covered by this report.

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INTRODUCTION

Water-resources data for the 1984 water year for northwest Florida consist of records of gage height, discharge, and water quality of streams; elevations of lakes and reservoirs; water levels and water quality of ground water; and discharge and water quality of springs. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous discharge measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Florida.

Records of discharge and stage of streams, and contents (or elevations) of lakes and reservoirs were first published in a series of U.S. Geological Survey Water-Supply Papers entitled, "Surface Water Supply of the United States." Through water year 1960, these Water-Supply Papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of Water-Supply Papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of Water-Supply Papers entitled, "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the principal cities in the United States or may be purchased from U.S. Geological Survey, 604 South Pickett Street, Alexandria, Va. 22304.

For water years 1961 through 1974, streamflow data were released by the U.S. Geological Survey in annual reports on a state-boundry basis. Water-quality records for water years 1964 through 1974 were similarly released, either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a state-boundary basis. These official Survey reports carry an identification number consisting of the two-letter state abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report FL-84-4". For archiving and general distribution, the reports for water years 1971-74 are also identified as water-data reports. These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (904) 681-7620.

COOPERATION

The systematic collection of water resources data in the State of Florida by the U.S. Geological Survey began in 1930 and has been continued in cooperation with state, federal, and local agencies. The data for this report were collected as part of a cooperative program with the following agencies:

Escambia County Utilities Authority
Florida Department of Environmental Regulation
Florida Department of Transportation
Northwest Florida Water Management District
Suwannee River Authority
Suwannee River Water Management District
County of Leon
County of Walton
City of Perry
City of Quincy
City of Tallahassee
Corps of Engineers, U.S. Army, Mobile District
U.S. Bureau of Land Management

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound units to the International System of units (SI) on the inside of the front cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Altitude is a value given a gaging station or a ground-water well, for which the elevation of the gage datum has not been determined by leveling from a bench mark. The approximate elevation of the gage was then obtained by barometric observation or from topographic map.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, trapped by the well. A flowing artesian well is one in which level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rod-like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, non-spore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the weight per unit area or volume of habitat.

Ash weight is the weight or amount of residue present after the residue from the dry weight determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash weight values of zooplankton and phytoplankton are expressed in g/m³ (grams per cubic meter), and periphyton and benthic organisms in g/m² (grams per square meter).

Dry weight refers to the weight of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the weight remains unchanged. This weight represents the total organic matter, ash and sediment, in the sample. Dry weight values are expressed in the same units as ash weight.

Organic weight or volatile weight of the living substance is the difference between the dry weight and the ash weight, and represents the actual weight of the living matter. The organic weight is expressed in the same units as for ash and dry weights.

Wet weight is the weight of living matter plus contained water.

Cfs-day is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, or approximately 646,000 gallons, and represents a runoff of approximately 0.0372 inch from 1 square mile.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural-water color or with carbonaceous organic pollution from sewage or industrial wastes.

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Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (ft³/s or cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute.

Detergents (methylene blue active substance, MBAS), anionic surfactants in detergents resist chemical oxidation and biological breakdown. Soap is an example of this class and the synthetic members are sodium salts of organic sulfonates or sulfates (Rose, 1966). Their persistence in water over long periods of time contributes to pollution of both ground water and surface water. Some of the effects produced from detergent pollution are unpleasant taste, odor, and foaming (Wayman, and others, 1962). Although the physiological implications of MBAS to human beings is unknown, prolonged ingestion of this material by rats is believed to be nontoxic (Paynter, 1960). The U.S. Public Health Service (1962) recommends that MBAS should not exceed 0.5 mg/L in drinking and culinary waters. ISD-W (1971) sets 0.2 mg/L as the highest desirable level and 1.0 mg/L as the maximum permissible level.

Discharge is the volume of water (or more broadly, total fluids), that passes a given point within a given period of time.

Mean discharge is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to the amount of a substance present in true chemical solution. In practice, however, the term includes all forms of the substance that will pass through a 0.45-micrometer membrane filter, and thus may include some very small (colloidal) suspended particles. Analyses are performed on filtered samples.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gageheight is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of gage height or discharge are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCo_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or district hydrologic feature as delineated by the Office of Water Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by a 8-digit number.

Land-surface datum is a datum that approximates land surface at each well.

Micrograms per liter (ug/L) is a unit expressing the concentration of chemical constituents in solution as weight (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the weight of solute per unit volume of water. Concentration of suspended sediment can also be expressed in mg/L based on the mass of sediment per liter of sample.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankter, or zooplankter.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Organism count/area refers to the number or organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meters (m^2), acres, or hectares. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Partial-record station is a particular site where limited gage height and streamflow data are collected systematically over a period of years for use in hydrologic analyses.

Periphyton is the assemblage of microorganisms attached to and growing upon solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticides are chemical compounds used to control the growth of undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Since the first application of DDT as an insecticide in the early 1930's, there have been almost 60,000 pesticide formulations registered, each containing at least one of the approximately 800 different basic pesticide compounds (Goerlitz and Brown, 1972, p. 24). The United States annually produces about one billion pounds of these compounds. Although efforts are being made to substitute many of the chlorinated hydrocarbon pesticides with more specific, fast acting, and easily degradable compounds, chlorinated hydrocarbon pesticides are still commonly used in many areas of the country.

Picocurie (pCi) is one millionth of the amount of radioactivity represented by a microcurie, which is the quantity of radiation represented by one millionth of a gram of radium-226. A picocurie of radium results in 2.22 disintegrations per minute.

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per 100 mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per 100 mL of sample.

Radioisotopes are isotope forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having an atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Recoverable from bottom material is the amount of a given constituent that can be extracted from bottom material by a particular digestion procedure used in the Central Laboratory. Usually the digestion involves heating with an acid or a mixture of acids. Complete extraction of the constituent is generally not possible by such digestion; hence the amount which is recoverable is somewhat less than the actual amount present in the sample.

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Runoff in inches (IN.) shows the depth of which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transformed by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Sediment discharge is the rate at which suspended sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight, or by volume, that is discharged in a given time.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks and dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids concentration of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream, and it may even vary in the same source with changes in the composition of the water (Durfor and Becker, 1964 p. 2729).

Stage-discharge relation is the relation between gage height and the volume of water per unit of time, flowing in a channel.

Streamflow describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff", as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Surface area of a lake is that area outlined on the latest U.S. Geological Survey topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All surface areas shown are those for elevations when the maps were made.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 ug membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required for all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determination of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 ug membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected forms of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

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Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Total organic carbon (TOC) is a measure of the organically related carbonaceous content of water. It includes all natural and manmade organic compounds which are combustable at a temperature of 950°C.

Water year in Geological Survey reports dealing with surface water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends. Thus, the water year beginning October 1, 1970, and ending September 30, 1971, is called the "1971 water year."

WDR is used as an abbreviation for "Water-Data Reports" published since 1975, in the REVISION paragraph to refer to previously published state annual basic-data reports.

WRD is used as an abbreviation for "Water-Resources Data" in the REVISIONS paragraph to refer to previously published state annual basic-data reports.

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

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SPECIAL NETWORKS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

The National Stream Quality Accounting Network (NASQAN) has been designed to meet many of the information demands of agencies or groups involved in planning and management on a national or regional scale. These agencies include the Water Resources Council, Council on Environmental Quality, Environmental Protection Agency, and interstate or State-Federal units, such as river-basin commissions or river-compact commissions.

The primary objectives of the accounting network are (1) to depict areal variability of water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in stream quality. In implementing the network, one or more stations in each river-basin unit is selected so as to sample a major part of the surface-water discharge from the unit.

Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Temperature, specific conductance, the major inorganic constituents, sediment, organic and minor inorganic constituents, bacterial content, and other biological parameters are measured periodically to provide information on their range, diversity, and variability. The ability of the stream to support biological life is assessed by periodic observations of the lower forms of aquatic plants and animals. Information obtained from the accounting network stations will provide a broad base of water-quality data on streams throughout the nation.

Pesticide program is a network of regularly sampled water-quality stations where additional samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

1. Perdido River at Barrineau Park
2. Escambia River near Century
3. Yellow River at Milligan
4. Choctawhatchee River near Bruce
5. Chipola River near Altha
6. Apalachicola River at Chattahoochee
7. Ochlockonee near Havana
8. St. Marks River near Newport
9. Aucilla River near Scanlon
10. Steinhatchee River near Cross City
11. Suwannee River at Branford
12. St. Marys River near Macclenny
13. Oklawaha River near Connor
14. Spruce Creek near Samsula
15. Withlacoochee River near Holder
16. St. Johns River near De Land
17. Hillsborough River near Zephyrhills
18. Alafia River at Lithia
19. Main Canal at Vero Beach
20. Kissimmee River at S65E near Okeechobee
21. Peace River at Arcadia
22. Myakka River near Sarasota
23. Fisheating Creek near Palmdale
24. St. Lucie Canal at lock near Stuart
25. Caloosahatchee Canal at Ortona lock near Labelle
26. West Palm Beach Canal at West Palm Beach
27. Miami Canal at NW 36th Street, Miami
28. Tamiami Canal-40 mile bend to Monroe
29. Santa Fe River at Worthington Springs
30. Econfina Creek near Bennett
31. Sopchoppy River near Sopchoppy (hydrologic bench-mark station)

Figure 2. NASQAN stations in the State of Florida.

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DOWNSTREAM ORDER AND STATION NUMBER

Surface-water stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all main stream stations are listed before the first main stream station. Stations on tributaries to tributaries are listed in a similar manner. In the lists of gaging stations and water-quality stations in the front of this report the rank of tributaries is indicated by indentation, each indentation representing one rank.

As an added means of identification, each gaging station, partial-record station, water-quality station, and some miscellaneous discharge measurement sites have been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of these stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station, such as 02335500, which appears just to the left of the station name includes the 2-digit part number "02" plus the 6-digit downstream order number "335500." In this report, the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. All records for a drainage basin encompassing more than one state can be arranged in downstream order by assembling pages from the various state reports by station number to include all records in the basin.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

Downstream order station numbers are not assigned to wells, and to some miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits are a sequential number for sites within a 1-second grid. In the event that the latitude-longitude coordinates for two sites are the same, sequential numbers "01," "02," are assigned to give each site a unique number. See figure below.

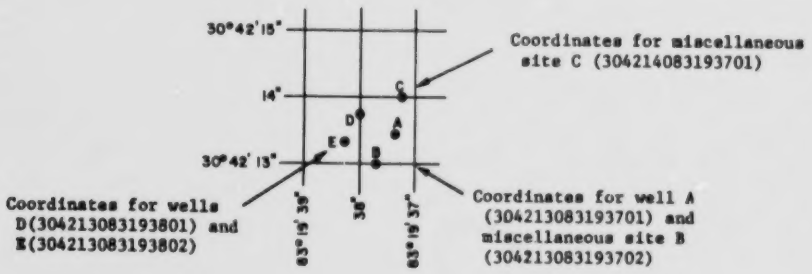

Figure 1. System for numbering wells and miscellaneous sites. (latitude and longitude)

EXPLANATION OF GAGE HEIGHT AND DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of gage heights and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of gage height are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives the fluctuations on a paper tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

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For stream-gaging stations, rating tables giving the discharge for any gage height are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge; such as slope-area, contracted opening measurements, computations of flow over dams or weirs, step backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation was subjected to change because of occasional or continual change in the physical features of the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by the technician are used in applying the gage-height corrections to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by the same method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from streams, tides, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by a rapid change in stage; at these stations the rate of change in stage is used as a factor in determining discharge.

At some stations there is no relation between stage and discharge because of the flat stream gradients and/or tidal fluctuations. Discharge is determined from ratings which are based on a relation between recorded velocity index unit at a fixed point and mean velocity at a fixed measuring section, and a relation between recorded stage and cross-sectional area at the measuring site.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1965 stands for the water year October 1, 1964, to September 30, 1965. If no daily, monthly, or annual figures of discharge are affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the new drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use, the datum of the present gage referred to National Geodetic Vertical Datum of 1929, and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS" on page 4.

Information pertaining to the accuracy of the discharge records, periods of no gage-height record if the period is continuous for more than 30 days or includes the maximum discharge for the year, and conditions which affect the natural flow of the gaging station is given under "REMARKS." Periods of backwater from an unusual source, of indefinite stage relation, or of any other unusual condition at the gage site are indicated and the accuracy of the records is affected. For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is also given under "REMARKS."

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Records of gage heights, daily discharges, discharge measurements, and elevations of lakes and reservoirs which are furnished in part or all is given under "COOPERATION."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete water years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete water years of record if the median differs from the average by more than 10 percent.

Under "EXTREMES," the extremes for the period of record are given first, extremes available outside the period of record are given next, and those for the current year are given last. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR: if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharge is not published for any canals, ditches, drains, or for any stream for which peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily tables for stream-gaging stations give the mean discharge for each day and are followed by monthly and yearly summaries. In the monthly summary, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record and miscellaneous stations follow the information for continuous record sites. Data for crest-stage partial-record discharge stations are presented in a table of annual maximum stage and discharge. The table of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations.

Accuracy of field data and computed results

The accuracy of discharge data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretation of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges is within 5 percent; "good" within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 cfs; to tenths between 1.0 and 10 cfs; to whole numbers between 10 and 1,000 cfs; and to 3 significant figures above 1,000 cfs. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments of losses are large in comparison with the observed discharge.

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Other data available

Information of a more detailed nature than that published for most of the gaging stations, such as discharge measurements, gage-height records, and rating tables, is on file in the subdistrict offices. Also, most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the Tallahassee Subdistrict office.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

For ground-water records, samples for analyses usually are collected at or near the well head.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature); extremes for the period of daily record; extremes for the current year; and general remarks.

For data collected at miscellaneous ground-water sites no descriptive statements are given, however, the site number, date of sampling, and other pertinant data are given in the table of chemical analyses.

Revisions

If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the subdistrict office.

Water temperature

Water temperatures are measured at most of the water-quality stations. For daily stations, the water temperatures are taken at about the same time each day in order that the data would not reflect diurnal variations in water temperature. Most large streams have small diurnal variations in water temperature; small, shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. The thermometers used for determining the water temperature are accurate to plus or minus 0.5°C.

At stations where digital monitors are located, the records consist of maximum and minimum temperatures for each day, the monthly maximum and minimum temperatures, and the yearly maximum and minimum temperatures.

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Sediment

Suspended sediment samples were collected monthly at stations in the Hydrologic Bench-Mark Network and National Stream Quality Accounting Network with depth-integrating samplers. Depth integrated samples were collected at three or more verticals in the cross section to determine variations in the cross section and to more accurately determine suspended sediment loads. Daily sediment loads in tons per day are reported for days on which samples were collected.

Mineral constituents in solution

All natural waters contain dissolved mineral matter. The quantity of dissolved mineral matter in natural water depends primarily on the type of rocks or soils with which the water has been in contact and the length of time of contact. Ground water is generally more highly mineralized than surface runoff because it remains in contact with the rocks and soils for much longer periods. Many streams are fed by both surface runoff and ground water from seepage or direct spring inflow. Such streams reflect the character of the more mineralized ground water during dry periods and are diluted by surface runoff during wet periods.

The mineral constituents and physical properties of waters reported in this report include those that have a practical bearing on water use. The results of analyses generally include silica, iron, calcium, magnesium, sodium, potassium, carbonate, bicarbonate, sulfate, chloride, fluoride, nitrate, pH, dissolved solids, and specific conductance. Aluminum, manganese, color, dissolved oxygen, and other dissolved constituents and physical properties are reported for certain streams. Microbiologic and organic components (pesticides, total organic carbon) and minor elements (arsenic, cobalt, cadmium, copper, lead, mercury, nickel, strontium, zinc, etc.) are determined occasionally for some streams in connection with specific studies and the results are reported.

Qualifying remarks codes

The following remarks codes may appear with the data in this report:

E	Estimated Value
<	Actual value is known to be less than the value shown
>	Actual value is known to be greater than the value shown
N	Presumptive evidence of presence of material
ND	Material specifically analyzed for but not detected
K	Results based on colony count outside the acceptance
M	Presence of material verified but not quantified range (non-ideal colony count)

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection of the data

Ground-water level data from a network of observation wells are published herein. The records include data from wells equipped with continuous water-level recorders and data from wells where water levels are measured periodically.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude as shown in figure 2, and (2) a local number that is provided for continuity with older reports and for other use as dictated by local needs.

Measurements are made in many types of wells under varying conditions of access and the methods of measurement are standardized. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either National Geodetic Vertical Datum (NGVD) or feet below land-surface datum. National Geodetic Vertical Datum of 1929 is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that approximates land surface at each well. If known, the datum of the land-surface above National Geodetic Vertical Datum is given in the well description. The height of the measuring point above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of the month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater, however, most measurements are reported to a hundredth of a foot.

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Access to WATSTORE Data

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's district offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

HYDROLOGIC CONDITIONS

Streamflow conditions were generally above average during the water year. The year started and ended below normal; however, heavy rains during March and April gave above average runoffs for all of the north Florida area east of the Chipola River basin. Average annual streamflow was about 5 percent above normal for the Waccasassa basin, but ranged from 60 to 120 percent above the long-term average for the Suwannee River basin. In the Steinhatchee, Econfina, Aucilla and St. Marks basins, streamflows ranged from 30 to 85 percent above the long-term average for the Steinhatchee and Econfina Rivers respectively. Streamflows in the Ochlockonee River basin ranged from 48 percent above average for the Sopchoppy River to 100 percent above average for the Ochlockonee River near Havana. From the Chipola River west to the Perdido River, the average flows were from near normal to 20 percent above the long-term average.

Water levels in northeast Florida were generally above average. The year started near normal, but good winter rainfalls brought most water levels up to or above long-term averages. Water levels in the Floridan aquifer along the coastal area of Okaloosa and Walton Counties continued to show declining levels. A few wells recorded new extreme lows during the dry summer months along the coastal areas of Okaloosa County.

Water levels in the sand and gravel aquifer of extreme northwest Florida were near normal.

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PUBLICATIONS OF TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

Thirty-seven manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett St., Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. WATER TEMPERATURE-INFLUENTIAL FACTORS, FIELD MEASUREMENT, AND DATA PRESENTATION, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. GUIDELINES FOR COLLECTION AND FIELD ANALYSIS OF GROUND-WATER SAMPLES FOR SELECTED UNSTABLE CONSTITUENTS, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. APPLICATION OF SURFACE GEOPHYSICS TO GROUND-WATER INVESTIGATIONS, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. APPLICATION OF BOREHOLE GEOPHYSICS TO WATER-RESOURCES INVESTIGATIONS, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. GENERAL FIELD AND OFFICE PROCEDURES FOR INDIRECT DISCHARGE MEASUREMENTS, by M. A. Benson and Tate Dalrymple: USGS-TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. MEASUREMENT OF PEAK DISCHARGE BY THE SLOPE-AREA METHOD, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. MEASUREMENT OF PEAK DISCHARGE AT CULVERTS BY INDIRECT METHODS, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. MEASUREMENT OF PEAK DISCHARGE AT WIDTH CONTRACTIONS BY INDIRECT METHODS, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. MEASUREMENT OF PEAK DISCHARGE AT DAMS BY INDIRECT METHODS, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. GENERAL PROCEDURE FOR GAGING STREAMS, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. STAGE MEASUREMENTS AT GAGING STATIONS, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. DISCHARGE MEASUREMENTS AT GAGING STATIONS, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. MEASUREMENT OF TIME OF TRAVEL AND DISPERSION IN STREAMS BY DYE TRACING, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A11. MEASUREMENT OF DISCHARGE BY MOVING-BOAT METHOD, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. AQUIFER-TEST DESIGN, OBSERVATION, AND DATA ANALYSIS, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. INTRODUCTION TO GROUND-WATER HYDRAULICS, A PROGRAMED TEXT FOR SELF-INSTRUCTION, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. TYPE CURVES FOR SELECTED PROBLEMS OF FLOW TO WELLS IN CONFINED AQUIFERS, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

3-C1. FLUVIAL SEDIMENT CONCEPTS, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. FIELD METHODS FOR MEASUREMENT OF FLUVIAL SEDIMENT, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. COMPUTATION OF FLUVIAL-SEDIMENT DISCHARGE, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. SOME STATISTICAL TOOLS IN HYDROLOGY, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. FREQUENCY CURVES, by H. C. Riggs: USGS-TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. LOW-FLOW INVESTIGATIONS, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. STORAGE ANALYSES FOR WATER SUPPLY, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. REGIONAL ANALYSES OF STREAMFLOW CHARACTERISTICS, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. COMPUTATION OF RATE AND VOLUME OF STREAM DEPLETION BY WELLS, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. METHODS FOR DETERMINATION OF INORGANIC SUBSTANCES IN WATER AND FLUVIAL SEDIMENTS, by M. W. Skougstad, and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. DETERMINATION OF MINOR ELEMENTS IN WATER BY EMISSION SPECTROSCOPY, by P. R. Barnett and E. C. Malloy Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. METHODS FOR ANALYSIS OF ORGANIC SUBSTANCES IN WATER, by D. F. Goerlitz and Eugene Brown: USGS-TWRI 5, Chapter A3. 1972. 40 pages.

5-A4. METHODS FOR COLLECTION AND ANALYSIS OF AQUATIC BIOLOGICAL AND MICROBIOLOGICAL SAMPLES, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. METHODS DOR DETERMINATION OF RADIOACTIVE SUBSTANCES IN WATER AND FLUVIAL SEDIMENTS, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS-TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. LABORATORY THEORY AND METHODS FOR SEDIMENT ANALYSIS, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

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7-C1. FINITE DIFFERENCES MODEL FOR AQUIFER SIMULATION IN TWO DIMENSIONS WITH RESULTS OF NUMERICAL EXPERIMENTS, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. COMPUTER MODEL OF TWO-DIMENSIONAL SOLUTE TRANSPORT AND DISPERSION IN GROUND WATER, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. A MODEL FOR SIMULATION OF FLOW IN SINGULAR AND INTERCONNECTED CHANNELS, by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. METHODS OF MEASURING WATER LEVELS IN DEEP WELLS, by M. S. Garber and F. C. Koopman: USGS-TWRI Bock 8, Chapter A1. 1968. 23 pages.

8-B2. CALIBRATION AND MAINTENANCE OF VERTICAL-AXIS TYPE CURRENT METERS, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

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SELECTED REFERENCES

American Public Health Association, and others 1965, Standard methods for the examination of water and wastewater, 12th ed.: Am. Public Health Assoc., New York, 769 p.

California State Water Quality Control Board, 1963, Water quality criteria; Pub. 3-A, p. 226.

Conover, C. S., and Leach, S. D., 1975, River basin and hydrologic unit map of Florida: Florida Bur. Geology Map Ser. 72.

Ellis, M. M., Westfall, B. A., and Ellis, M. D., 1946, Determination of water quality, U.S. Fish and Wildlife Reserve Report 9.

Florida Department of Environmental Regulation, 1983, Water quality standards: Chapter 17-3 in Florida Administrative Code.

Florida Department of Environmental Regulation, 1982, Public drinking water systems: Chapter 17-22 in Florida Administrative Code.

Georlitz, Donald R., and Brown, Eugene, 1972, Methods for analysis of organic substances in water: U. S. Geological Survey Techniques of Water Resources-Inv., Book 5, Chapter A3, 40 p.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U. S., Geological Survey Water-Supply Paper 1541-A, 29 p.

Maier, F. J., 1950, Fluoridation of Public Water Supplies, Journal of the American Water Works Association, v. 42, pt. 1, 1120-1132 p.

Maxcy, K. F., 1950, Report on the relation of nitrate concentrations in well waters to the occurrence of methemoglobinemia: National Research Council, Sanitary Engineering and Environment, Appendix D., 271 p.

Paynter, O. E., 1960, The chronic toxicity of dodecylbenzene sodium sulfonate: U. S. Public Health Conference on Physiological Aspects of Water Quality Proc., Washington, D. C., Sept. 89, 1960, 175-179 p.

Rose, Arthur and Elizabeth, 1966, The condensed chemical dictionary: Reinhold Pub. Corp., New York, 7th ed., 285 p.

Slack, K. V., Averett, R. C., Grieson, P. E., and Lipscomb, R. G., 1973, Methods for collection and analysis of aquatic biological and microbiological samples: U.S. Geological Survey Techniques of Water Resources Inv., Book 5, Chapter A4, 165 p.

Swenson, H. A. and Baldwin, H. L., 1965, A Primer on water quality: Washington, U. S. Govt. Printing Office, 27 p.

U.S. Environmental Proection Agency, 1975. National interim primary drinking water regulations: Federal Register v. 40, no. 51, March 14, p. 11990-11998.

_____1976 (1977), Quality criteria for water: U.S. Government Printing Office, 256 p.

_____1977, National secondary drinking water regulations: Federal Register, v. 42, no. 62, March 31, p. 17143-17146.

U.S. Public Health Service, 1962, Drinking water standards: U.S. Dept. Health, Education, and Welfare, Public Health Service: Pub. no 956.

Wayman, C. H., Robertson, J. B., and Page, H. G., 1962, Foaming characteristics of synthetic-detergent solutions: U.S. Geological Survey, Prof. Paper 450D, art. 178, D198 p.

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STAGE, DISCHARGE, AND WATER QUALITY OF STREAMS

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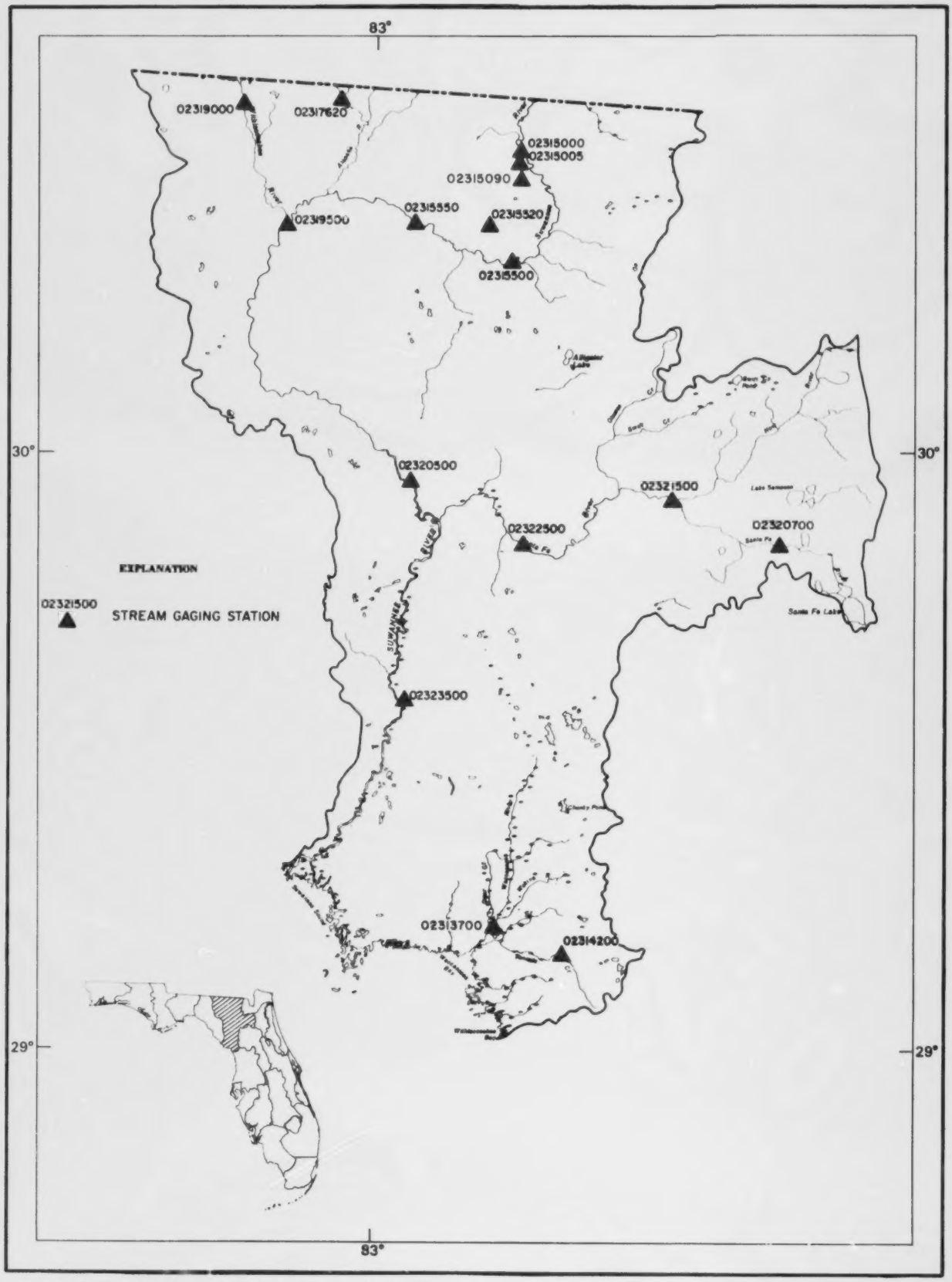

Figure 4. Location of stream gaging stations in the Waccasassa and Suwannee River basins.

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02313700 WACCASASSA RIVER NEAR GULF HAMMOCK, FL

LOCATION.--Lat 29°12'14", long 82°46'09", in SW¼ sec.2, T.15 S., R.15 E., Levy County, Hydrologic Unit 03110101, near right bank at abandoned railroad grade, 0.5 mi upstream from Otter Creek, 3.6 mi upstream from mouth, and 4 mi southwest of Gulf Hammock.

DRAINAGE AREA.--480 mi², approximately, including that of Otter Creek.

PERIOD OF RECORD.--March 1963 to September 1978; November 1980 to current year (fragmentary).

REVISED RECORDS.--WSP 2105: 1969. WRD FL-72-1: Drainage area.

GAGE.--Water-stage and water-current meter recorders. Datum of gage is 10.51 ft below National Geodetic Vertical Datum of 1929. Prior to Nov. 24, 1980, water-stage and deflection-meter recorders at same site at datum 10.00 ft higher.

REMARKS.--Records poor. No gage-height record for many periods throughout the water year. Flow affected by tide. Discharge computed from continuous velocity record obtained from water-current meter. Records include flow of Otter Creek. Above bankfull stage, discharge measurements are made along abandoned railroad fill and include all flow from about 1.5 mi northwest to 0.8 mi northeast of gaging station.

AVERAGE DISCHARGE.--15 years (water years 1964-78), 315 ft³/s 228,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,200 ft³/s Sept. 12, 1964, gage height, 16.96 ft present datum; maximum daily reverse flow 1,810 ft³/s June 9, 1966, minimum gage height, 7.33 ft present datum, Sept. 9, 1965.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	105	94	667								
2	---	46	104	644								
3	---	-11	38	588								
4	---	-19	76	522								
5	-20	7.8	99	478								
6	41	48	128	410								
7	90	9.0	155	367								
8	73	142	127	304								
9	93	125	113	270								
10	88	92	112	134								
11	12	159	84	405								
12	16	154	216	244								
13	108	125	190	239								
14	127	72	203	220								
15	158	74	259	203								
16	142	147	246	186								
17	115	74	238	192								
18	107	82	163	168								
19	79	3.9	174	258								
20	-24	6.8	167	291								
21	---	255	143	279								
22	---	265	158	271								
23	---	222	126	228								
24	---	7.4	143	197								
25	---	301	134	220								
26	---	183	131	191								
27	---	106	93	178								
28	---	-34	27	189								
29	---	48	357	196								
30	---	127	419	168								
31	---	---	626	258								
TOTAL	---	2922.9	5343	9165								
MEAN	---	97.4	172	296								
MAX	---	301	626	667								
MIN	---	-34	27	134								
CFSM	---	.20	.36	.62								
IN.	---	.23	.41	.71								
AC-FT	---	5800	10600	18180								

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02314200 TENMILE CREEK AT LEBANON STATION, FL

LOCATION.--Lat 29°09'39", long 82°38'21", in SE¼ sec.24, T.15 S., R.16 E., Levy County, Hydrologic Unit 03110101, near center of span on downstream side of bridge on U.S. Highways 19 and 98, just downstream from North Prong Tenmile Creek, 0.2 mi south of Lebanon Station, 9.4 mi upstream from mouth, and 13 mi northwest of Dunnellon.

DRAINAGE AREA.--26 mi², approximately; 34 mi², approximately, includes that of Horse Hole Creek.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 15.00 ft National Geodetic Vertical Datum of 1929. Since Feb. 26, 1964, nonrecording gage at Horse Hole Creek. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor. Records do not include considerable amount of water diverted naturally above station into Horse Hole Creek basin. Discharge measurements of Horse Hole Creek, drainage area 8.1 mi², approximately, are made at bridge on U.S. Highways 19 and 98, 1.9 mi south of Tenmile Creek station.

AVERAGE DISCHARGE.--21 years, 38.3 ft³/s, 27,690 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,290 ft³/s Sept. 11, 1964, gage height, 12.38 ft; no flow for many days in 1964, 1967, 1977, 1981; minimum gage height, 2.88 ft July 1, 1977.

EXTREMES FOR PERIOD OF RECORD (Horse Hole Creek-02314205).--Maximum discharge measured, 1,270 ft³/s Sept. 11, 1964, elevation, 26.56 ft NGVD; creek dry at times each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 240 ft³/s Feb. 23, gage height, 8.48 ft, no peak above base of 300 ft³/s; minimum 0.20 ft³/s June 13, gage height, 3.00 ft.

Discharge measurements in cubic feet per second, of Horsehole Creek near Lebanon Station for the water year 1983-84 are given in table below:

DATE	TIME	STREAM FLOW INSTANTANEOUS (CFS)	DATE	TIME	STREAM FLOW INSTANTANEOUS (CFS)
Nov. 2...	----	0.01	May 10...	----	0.02
Jan. 12...	----	2.0	July 18...	1530	.27
Feb. 29...	----	9.6	Aug 21...	1257	5.6

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02314200 TENMILE CREEK AT LEBANON STATION, FL--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	13	47	99	36	110	15	12	12	110	95	12
2	28	12	44	87	32	92	13	8.8	9.5	98	114	16
3	23	10	40	77	29	81	13	6.7	7.2	78	102	15
4	19	9.1	35	67	27	70	143	5.3	4.8	58	85	13
5	15	11	33	57	25	60	198	5.0	3.0	56	85	14
6	13	14	33	49	23	52	166	5.3	1.8	57	69	14
7	12	13	49	43	20	58	132	4.3	1.1	57	49	13
8	11	41	48	36	18	53	102	3.2	.72	44	38	11
9	16	52	43	32	17	46	98	3.0	.44	30	30	9.1
10	14	47	38	32	16	40	121	3.2	.29	26	24	7.3
11	14	40	33	35	15	35	105	3.0	.27	29	20	5.6
12	17	33	55	34	15	30	91	2.4	.26	47	17	4.0
13	22	28	65	38	15	31	80	1.8	.26	39	14	2.7
14	32	24	60	41	15	29	70	1.4	.37	30	12	2.0
15	39	20	56	40	14	26	77	1.1	.40	24	14	5.3
16	51	18	52	38	13	23	70	.81	.35	20	14	6.0
17	53	15	47	36	12	20	59	.55	.30	17	14	5.0
18	49	14	42	37	11	18	49	.44	.46	17	14	4.8
19	42	12	38	184	11	16	40	.34	1.3	29	20	14
20	35	27	34	213	10	15	33	.29	.71	71	47	15
21	29	88	31	196	9.6	20	28	.27	.44	90	96	12
22	25	82	29	154	46	20	23	.38	.54	86	116	8.7
23	25	74	27	125	215	19	20	.88	1.4	150	114	5.7
24	29	65	26	105	150	17	18	.94	1.5	105	95	3.3
25	30	60	23	91	114	16	15	1.2	1.0	182	77	2.0
26	28	51	21	82	92	14	13	2.3	.86	152	60	1.3
27	24	43	19	72	123	18	11	2.5	.62	132	46	1.0
28	21	38	19	63	204	22	8.6	12	.43	101	33	99
29	18	43	48	55	142	21	7.6	20	24	79	23	155
30	16	49	132	47	---	19	12	19	99	65	17	140
31	14	---	114	41	---	17	---	15	---	84	13	---
TOTAL	798	1046.1	1381	2306	1469.6	1108	1831.2	143.40	175.32	2163	1567	616.8
MEAN	25.7	34.9	44.5	74.4	50.7	35.7	61.0	4.63	5.84	69.8	50.5	20.6
MAX	53	88	132	213	215	110	198	20	99	182	116	155
MIN	11	9.1	19	32	9.6	14	7.6	.27	.26	17	12	1.0
CFSM	.99	1.34	1.71	2.86	1.95	1.37	2.35	.18	.23	2.69	1.94	.79
IN.	1.14	1.50	1.98	3.30	2.10	1.59	2.62	.21	.25	3.09	2.24	.88
AC-FT	1580	2070	2740	4570	2910	2200	3630	284	348	4290	3110	1220

CAL YR 1983	TOTAL	14539.60	MEAN 39.8	MAX 439	MIN .45	CFSM 1.53	IN 20.80	AC-FT 28840			
WTR YR 1984	TOTAL	14605.42	MEAN 39.9	MAX 215	MIN .26	CFSM 1.54	IN 20.90	AC-FT 28970			

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02315000 SUWANNEE RIVER NEAR BENTON, FL

LOCATION.--Lat 30°30'26", long 82°42'59", in NE¼ sec.9, T.1 N., R.16 E., Columbia County, Hydrologic Unit 03110201, near center of channel on downstream side of bridge on State Highway 6, 3.7 mi northwest of Benton, 6.4 mi south of Florida-Georgia State Line, 13.7 mi east of Jasper, and 196 mi, upstream from mouth.

DRAINAGE AREA.--2,090 mi², approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year. Miscellaneous discharge measurements for some periods July 1934 to September 1975. Records for December 1931 to June 1934, at site 2.0 mi upstream (at Turner Bridge) not equivalent owing to difference in drainage areas.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Dec. 8, 1931 to June 30, 1934, nonrecording gage at site 2.0 mi upstream at datum unknown.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--9 years, 1,564 ft³/s, 10.16 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,300 ft³/s Apr. 6, 1984, gage height, 99.90 ft; minimum daily, 5.0 ft³/s Aug. 9, 1977; minimum gage height, 74.13 ft, Nov. 5, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge measured, 27,700 ft³/s Apr. 6, 1973, gage height, 102.80 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,300 ft³/s Apr. 6, gage height, 99.90 ft; minimum daily, 38 ft³/s Nov. 10, gage height, 74.58 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	357	79	390	3690	3560	3660	15400	4940	987	866	2350	987
2	271	73	376	3900	3690	4070	15900	4320	928	1100	2830	944
3	252	72	364	4110	4100	4410	16400	3770	863	1550	3140	886
4	242	67	342	4240	4480	4600	17400	3260	791	2080	3220	837
5	202	61	348	4340	4700	4750	17900	2850	731	2390	3250	746
6	183	58	415	4400	4920	5120	18200	2480	677	2600	3300	689
7	174	60	480	4440	5290	6050	18000	2190	626	2780	3210	621
8	158	61	512	4460	5620	7990	17700	1970	574	2810	3020	546
9	137	51	519	4420	5940	10400	17600	1780	525	2650	2800	488
10	172	38	514	4280	6160	12500	17400	1590	470	2440	2620	444
11	181	41	612	4110	6310	13800	16800	1410	427	2200	2490	415
12	176	52	902	4050	6430	14400	16200	1280	390	2030	2120	390
13	170	60	1120	4010	6450	14700	15500	1130	357	1860	1760	376
14	161	53	1190	3710	6480	14700	14900	1000	340	1530	1500	357
15	158	52	1210	3390	6410	14700	14000	928	322	1330	1320	322
16	158	54	1220	3220	6310	14600	13100	850	307	1170	1140	298
17	161	56	1330	3070	6170	14400	12500	773	300	1090	979	275
18	158	57	1550	2900	5980	14000	11800	743	285	1130	845	256
19	144	58	1670	2800	5760	13800	11000	691	256	1410	773	240
20	137	58	1740	2680	5620	13300	10300	562	238	1780	746	234
21	127	61	1780	2560	5160	12700	9680	495	216	2080	728	210
22	120	86	1850	2470	4590	12200	9090	470	318	2550	723	200
23	122	134	1980	2370	4350	11600	8610	453	461	2800	784	185
24	127	176	2120	2280	4170	10900	8070	463	500	2750	847	169
25	130	200	2210	2230	3800	10300	7550	463	519	2600	923	147
26	122	340	2350	2200	3470	9820	7160	413	495	2370	987	132
27	116	367	2470	2410	3410	9930	6790	410	413	2120	1010	238
28	111	364	2510	2640	3400	10700	6450	516	401	2110	1010	385
29	109	373	2540	2700	3420	11400	6010	713	468	1940	1020	473
30	108	390	2980	2960	---	13100	5480	1020	667	1830	1030	548
31	100	---	3510	3290	---	14700	---	1040	---	1970	1010	---
TOTAL	5044	3652	43104	104330	146150	333300	382890	44973	14852	61916	53485	13038
MEAN	163	122	1390	3365	5040	10750	12760	1451	495	1997	1725	435
MAX	357	390	3510	4460	6480	14700	18200	4940	987	2810	3300	987
MIN	100	38	342	2200	3400	3660	5480	410	216	866	723	132
CFSM	.08	.06	.67	1.61	2.41	5.14	6.11	.69	.24	.96	.83	.21
IN.	.09	.07	.77	1.86	2.60	5.93	6.82	.80	.26	1.10	.95	.23
AC-FT	10000	7240	85500	206900	289900	661100	759500	89200	29460	122800	106100	25860

CAL YR 1983 TOTAL 879603 MEAN 2410 MAX 9610 MIN 38 CFSM 1.15 IN 15.66 AC-FT 1745000
WTR YR 1984 TOTAL 1206734 MEAN 3297 MAX 18200 MIN 38 CFSM 1.58 IN 21.48 AC-FT 2394000

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02315000 SUWANNEE RIVER NEAR BENTON, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76.38	74.90	76.52	87.19	86.84	87.09	98.81	90.28	78.94	78.48	83.42	78.94
2	75.98	74.86	76.46	87.73	87.18	88.18	99.00	88.79	78.72	79.34	84.83	78.78
3	75.89	74.85	76.41	88.27	88.25	89.02	99.20	87.39	78.47	80.91	85.70	78.56
4	75.84	74.82	76.31	88.61	89.20	89.48	99.58	86.02	78.19	82.60	85.90	78.37
5	75.64	74.77	76.34	88.88	89.70	89.83	99.77	84.87	77.95	83.55	86.00	78.01
6	75.54	74.75	76.63	89.02	90.23	90.69	99.88	83.80	77.73	84.17	86.12	77.78
7	75.49	74.76	76.90	89.12	91.09	92.65	99.82	82.94	77.52	84.69	85.88	77.50
8	75.40	74.77	77.03	89.19	91.83	94.98	99.70	82.25	77.30	84.76	85.36	77.18
9	75.28	74.69	77.06	89.08	92.42	96.44	99.67	81.65	77.09	84.30	84.72	76.93
10	75.48	74.58	77.04	88.71	92.87	97.53	99.57	81.04	76.86	83.68	84.23	76.75
11	75.53	74.60	77.46	88.27	93.15	98.11	99.37	80.44	76.68	82.98	83.84	76.63
12	75.50	74.70	78.62	88.14	93.35	98.38	99.10	79.98	76.52	82.46	82.74	76.52
13	75.47	74.76	79.42	88.02	93.40	98.51	98.83	79.46	76.38	81.93	81.60	76.46
14	75.42	74.71	79.67	87.23	93.43	98.52	98.58	79.00	76.30	80.84	80.75	76.38
15	75.40	74.70	79.76	86.38	93.33	98.49	98.22	78.72	76.22	80.18	80.13	76.22
16	75.40	74.72	79.80	85.92	93.14	98.47	97.80	78.42	76.15	79.62	79.51	76.11
17	75.42	74.73	80.17	85.49	92.90	98.37	97.51	78.12	76.12	79.32	78.91	76.00
18	75.40	74.74	80.92	85.03	92.52	98.21	97.15	78.00	76.05	79.45	78.40	75.91
19	75.32	74.75	81.32	84.72	92.08	98.10	96.74	77.79	75.91	80.44	78.12	75.83
20	75.28	74.75	81.52	84.38	91.83	97.88	96.39	77.25	75.82	81.65	78.01	75.80
21	75.22	74.77	81.67	84.03	90.79	97.60	96.03	76.96	75.71	82.60	77.94	75.68
22	75.18	74.95	81.87	83.78	89.45	97.37	95.68	76.86	76.20	84.01	77.92	75.63
23	75.19	75.26	82.30	83.49	88.89	97.08	95.38	76.79	76.82	84.74	78.16	75.55
24	75.22	75.50	82.74	83.22	88.45	96.73	95.03	76.83	76.98	84.60	78.41	75.46
25	75.24	75.63	83.01	83.05	87.46	96.40	94.66	76.83	77.06	84.16	78.70	75.34
26	75.19	76.30	83.42	82.97	86.60	96.11	94.28	76.62	76.96	83.49	78.94	75.25
27	75.15	76.42	83.78	83.61	86.43	96.17	93.80	76.61	76.62	82.74	79.01	75.82
28	75.12	76.41	83.90	84.27	86.40	96.59	93.40	77.05	76.57	82.70	79.04	76.50
29	75.11	76.45	83.98	84.46	86.45	96.97	92.58	77.88	76.85	82.17	79.08	76.87
30	75.10	76.52	85.25	85.20	---	97.80	91.53	79.08	77.69	81.82	79.11	77.19
31	75.05	---	86.70	86.10	---	98.49	---	79.13	---	82.25	79.03	---
TOTAL	2337.83	2253.12	2483.98	2673.56	2619.66	2966.24	2917.06	2486.85	2308.38	2550.63	2519.51	2299.95
MEAN	75.41	75.10	80.13	86.24	90.33	95.69	97.24	80.22	76.95	82.28	81.27	76.67
MAX	76.38	76.52	86.70	89.19	93.43	98.52	99.88	90.28	78.94	84.76	86.12	78.94
MIN	75.05	74.58	76.31	82.97	86.40	87.09	91.53	76.61	75.71	78.48	77.92	75.25

CAL YR 1983 TOTAL 29988.20 MEAN 82.16 MAX 95.99 MIN 74.58
WTR YR 1984 TOTAL 30416.77 MEAN 83.11 MAX 99.88 MIN 74.58

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02315000 SUWANNEE RIVER NEAR BENTON, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1956 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT												
04...	1415	269	55	4.2	25.0	.40	7.5	.9	.01	.010	.02	.020
DEC												
13...	1440	1200	58	4.2	13.0	1.9	9.2	2.1	.01	.010	.02	.010
FEB												
01...	1715	3680	65	4.2	10.0	.80	10.2	1.8	.01	.010	.02	.010
MAY												
01...	0940	5030	52	5.0	23.0	.80	5.2	1.4	.00	.020	.02	.010
29...	1350	737	53	4.4	26.0	3.3	6.0	.4	.01	.010	.02	.020
JUL												
23...	1555	2870	49	3.8	26.0	1.5	7.0	1.9	.00	.020	.02	.010

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT												
04...	.90	.92	.94	4.2	.070	.070	460	0	460	2	<1	14
DEC												
13...	.71	.72	.74	3.3	.060	.050	--	--	--	--	--	--
FEB												
01...	.64	.65	.67	3.0	.040	.040	--	--	--	--	--	--
MAY												
01...	.99	1.0	1.0	4.5	.060	.060	--	--	--	--	--	--
29...	1.1	1.1	1.1	5.0	.080	.070	--	--	--	--	--	--
JUL												
23...	.88	.89	.91	4.0	.060	.060	--	--	--	--	--	--

DATE	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT												
04...	0	730	10	9	1	20	6	14	<.1	3	23	45
DEC												
13...	--	--	--	--	--	--	--	--	--	--	--	42
FEB												
01...	--	--	--	--	--	--	--	--	--	--	--	39
MAY												
01...	--	--	--	--	--	--	--	--	--	--	--	40
29...	--	--	--	--	--	--	--	--	--	--	--	35
JUL												
23...	--	--	--	--	--	--	--	--	--	--	--	42

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02315005 HUNTER CREEK NEAR BELMONT, FL

LOCATION.--Lat 30°29'08", long 82°42'44", in SE¼ sec.16, T.1 N., R.16 E., Hamilton County, Hydrologic Unit 03110201, on left bank 30 ft downstream from bridge on State Highway 135, 0.8 mi upstream from mouth, and 1.6 mi southeast of Belmont.

DRAINAGE.--Indeterminate, due to progressive strip mining.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1970 (one discharge measurement); August 1971 to January 1979 (discharge measurements only); January to September 1979 (fragmentary); October 1979 to current year.

REVISED RECORDS.--WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 100 ft from topographic map.

REMARKS.--Record fair. Flow partly regulated by control structures on holding ponds. Possible interchange of water between Hunter Creek, Swift Creek, and Roaring Creek basins due to release from diked phosphate mining area encompassing parts of the three basins. Flow contains some ground water used for phosphate mining.

EXTREMES FOR PERIOD OF RECORD.--Maximum measured discharge, 425 ft³/s June 26, 1972, gage height, 11.32 ft; since October 1979, maximum daily discharge, 374 ft³/s, estimated; maximum gage height, 12.13 ft Apr. 5, 6 (backwater from Suwannee River); no flow part of each day Oct. 15, 16, 1980, Aug. 26-31, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 374 ft³/s Mar. 28, estimated; maximum gage height, 12.13 ft, Apr. 5, 6 (backwater from Suwannee River); minimum daily discharge, 0.22 ft³/s Nov. 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	.44	8.4	61	11	27	230	53	19	29	67	3.3
2	3.9	.38	7.7	50	9.1	23	197	47	14	59	44	5.0
3	3.2	.38	7.5	40	8.4	21	170	50	11	66	32	5.1
4	2.6	.27	7.6	33	12	18	350	62	8.7	54	24	6.2
5	1.8	.27	7.4	29	12	16	315	58	7.3	45	20	8.9
6	1.7	.22	8.6	26	11	32	270	52	6.1	66	20	10
7	1.6	.22	8.7	25	10	87	230	50	5.4	44	16	11
8	1.8	.49	7.6	18	11	92	300	49	4.7	30	13	11
9	4.1	.49	7.0	15	8.7	70	270	48	4.2	22	11	12
10	6.9	.44	16	14	8.6	58	245	48	3.9	16	9.1	12
11	7.5	.33	21	14	9.3	52	220	46	3.6	35	7.9	13
12	5.7	.69	40	13	10	48	195	42	3.3	70	6.7	13
13	5.3	.44	26	12	16	44	180	25	3.2	39	5.7	9.7
14	5.6	.27	22	11	19	39	165	22	4.5	25	5.4	6.9
15	4.9	.27	20	11	16	36	155	19	13	24	4.8	4.6
16	4.4	.38	19	12	14	34	145	16	15	27	4.5	3.5
17	4.0	.27	18	12	11	31	140	12	11	22	3.8	2.9
18	2.8	.27	18	10	9.6	29	130	8.7	8.2	27	4.0	2.6
19	2.1	.33	17	12	8.4	27	125	6.5	6.5	86	5.5	2.6
20	1.6	4.8	15	12	7.7	26	122	8.3	5.0	138	5.8	2.5
21	1.3	6.0	15	11	7.2	25	120	10	4.7	125	6.3	2.7
22	1.2	6.2	15	10	6.9	24	119	7.9	11	112	5.6	4.0
23	1.4	5.2	14	9.6	7.9	23	117	9.6	10	116	6.1	4.8
24	1.3	9.5	13	9.9	7.1	22	114	11	11	92	5.9	4.6
25	.99	26	11	11	6.4	21	104	11	7.8	70	5.4	4.2
26	.88	18	9.9	12	5.8	20	96	11	10	51	5.6	3.5
27	.64	15	9.1	15	21	100	85	21	20	37	5.4	3.2
28	.55	14	18	15	39	374	71	44	10	30	4.7	13
29	.55	11	70	14	32	330	64	35	8.2	25	4.2	25
30	.60	9.5	86	13	---	300	57	30	10	28	3.7	24
31	.49	---	72	12	---	260	---	23	---	49	3.0	---
TOTAL	86.00	132.05	635.5	562.5	356.1	2309	5101	936.0	260.3	1659	366.1	234.8
MEAN	2.77	4.40	20.5	18.1	12.3	74.5	170	30.2	8.68	53.5	11.8	7.83
MAX	7.5	26	86	61	39	374	350	62	20	138	67	25
MIN	.49	.22	7.0	9.6	5.8	16	57	6.5	3.2	16	3.0	2.5
AC-FT	171	262	1260	1120	706	4580	10120	1860	516	3290	726	466

CAL YR 1983 TOTAL 7967.46 MEAN 21.8 MAX 174 MIN .00 AC-FT 15800
WTR YR 1984 TOTAL 12638.35 MEAN 34.5 MAX 374 MIN .22 AC-FT 25070

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02315005 HUNTER CREEK NEAR BELMONT, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
OCT										
05...	1100	2.1	138	7.3	20.5	2.3	7.5	1.2	--	.24
DEC										
15...	1230	22	68	4.9	13.0	1.7	--	1.5	.60	.03
FEB										
01...	1630	9.6	84	6.1	9.5	1.2	10.2	1.8	.70	.05
MAY										
01...	0830	51	328	6.4	23.0	.80	5.8	3.2	2.4	.24
JUL										
24...	1300	84	92	5.3	24.0	.30	6.2	1.5	.80	.01

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)
OCT										
05...	.010	.25	.020	.57	.59	.84	3.7	.600	.580	280
DEC										
15...	.010	.04	.010	.81	.82	.86	3.8	.390	.370	--
FEB										
01...	.010	.06	.010	.55	.56	.62	2.7	.320	.280	--
MAY										
01...	.080	.32	.210	.89	1.1	1.4	6.3	2.40	2.20	--
JUL										
24...	.020	.03	.010	.96	.97	1.0	4.4	.720	.660	--

DATE	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT									
05...	110	170	3	<1	1	900	140	760	8
DEC									
15...	--	--	--	--	--	--	--	--	--
FEB									
01...	--	--	--	--	--	--	--	--	--
MAY									
01...	--	--	--	--	--	--	--	--	--
JUL									
24...	--	--	--	--	--	--	--	--	--

DATE	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
05...	6	2	10	3	7	<.1	3	6	14
DEC									
15...	--	--	--	--	--	--	--	--	39
FEB									
01...	--	--	--	--	--	--	--	--	34
MAY									
01...	--	--	--	--	--	--	--	--	11
JUL									
24...	--	--	--	--	--	--	--	--	36

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02315090 ROARING CREEK NEAR BELMONT, FL

LOCATION.--Lat 30°25'50", long 82°40'00", Hamilton County, Hydrologic Unit 03110201, at bridge on State Highway 135, 5.8 mi southeast of Belmont.

DRAINAGE AREA.--17.5 mi².

PERIOD OF RECORD.--November 1967 to August 1970; March 1977 to April 1978; December 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
DEC										
15...	1030	12	60	3.6	13.0	1.3	--	1.2	.60	.01
FEB										
01...	1530	3.7	76	4.6	9.5	.90	11.0	3.6	.60	.00
MAY										
01...	1135	1.4	59	6.2	24.0	.50	4.8	1.4	.60	.01
JUL										
24...	1450	2.9	60	4.9	25.0	1.0	5.9	1.2	.60	.00

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
DEC										
15...	.010	.02	.010	.89	.90	.92	4.1	.180	.180	48
FEB										
01...	.020	.02	.010	.96	.97	.99	4.4	.210	.200	53
MAY										
01...	.020	.03	.060	1.3	1.4	1.4	6.3	.540	.500	49
JUL										
24...	.020	.02	.010	1.2	1.2	1.2	5.4	.350	.330	61

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02315500 SUWANNEE RIVER AT WHITE SPRINGS, FL

LOCATION.--Lat 30°19'32", long 82°44'18", in SW¼ sec.8, T.2 S., R.16 E., Columbia County, Hydrologic Unit 03110201, on downstream side of bridge on U.S. Highway 41, 1.0 mi southeast of White Springs and 171 mi upstream from mouth.

DRAINAGE AREA.--2,430 mi² approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1906 to December 1908, February 1927 to current year.

REVISED RECORDS.--WSP 1504: 1906, 1908. WSP 1905: WDR FL-75-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 31, 1932, nonrecording gage at site 1.0 mi downstream at datum 48.54 ft. Aug. 1, 1932 to Oct. 10, 1979, water-stage recorder at datum 49.54 ft. October 11, 1979 to December 1, 1983, non-recording gage at site 2.2 miles downstream at NGVD.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--59 years (water years 1907-08, 1928-84), 1,870 ft³/s, 10.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,100 ft³/s Apr. 10, 1973, gage height, 88.56 ft present datum; minimum, 4.8 ft³/s Nov. 15, 1931; minimum gage height, 49.59 ft present datum June 24-26, 1955, part or all of each day Nov. 3-8, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 26,200 ft³/s Apr. 10; minimum daily, 121 ft³/s Nov. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	602	180	602	4770	3780	4290	17700	6190	928	882	3130	1320
2	562	169	630	4810	4030	4430	18700	5550	960	1220	3520	1290
3	528	161	575	4850	4270	4690	19800	4910	973	1640	3640	1240
4	475	151	556	4940	4540	4900	22600	4360	970	2190	3800	1140
5	438	146	549	4970	4830	5090	24900	3830	954	2520	3870	1050
6	401	143	570	4990	5090	5350	25900	3350	922	2770	3760	957
7	372	142	627	5050	5370	6350	26100	2980	875	2980	3620	900
8	379	146	673	5060	5680	7160	26000	2660	857	3090	3530	842
9	427	151	679	4960	5940	7780	26000	2420	759	3030	3310	766
10	495	148	693	4700	6140	8470	26200	2170	687	2820	3080	711
11	506	146	821	4610	6280	9470	26000	1940	622	2580	2820	676
12	451	143	1100	4430	6370	10800	25200	1750	567	2470	2550	630
13	404	136	1470	4260	6460	12200	24100	1580	525	2290	2270	583
14	384	130	1570	4090	6500	13400	22800	1450	495	2050	2010	541
15	379	126	1650	3920	6490	14500	21400	1330	484	1790	1760	492
16	372	124	1750	3730	6410	15200	20100	1210	470	1600	1540	464
17	353	123	1860	3540	6280	15700	18700	1090	464	1440	1350	435
18	325	121	1940	3390	6110	15900	17200	967	440	1350	1190	409
19	310	158	2040	3270	5940	15900	16000	875	412	1450	1080	384
20	289	252	2130	3160	5740	15700	14800	806	384	2210	1020	360
21	278	306	2210	3040	5480	15400	13900	729	372	2550	1020	339
22	268	330	2290	2930	5190	14800	12900	676	422	2690	1030	334
23	266	348	2340	2820	4880	13600	12100	673	647	3160	1040	316
24	261	367	2360	2750	4540	13200	11500	667	702	3420	1150	295
25	257	396	2370	2710	3710	12900	10800	690	658	3320	1300	274
26	248	459	2390	2700	3390	12600	9970	735	627	3170	1380	254
27	235	536	2370	2750	3880	12300	9130	781	616	3010	1410	248
28	215	580	2560	2880	4250	13600	8320	830	578	2730	1430	297
29	200	583	3460	3070	4270	15200	7520	851	572	2510	1420	599
30	194	580	4480	3280	---	15800	6840	869	656	2460	1410	869
31	189	---	4700	3530	---	16600	---	900	---	2660	1370	---
TOTAL	11063	7481	54015	119960	151840	353280	543180	59819	19598	74052	66810	19015
MEAN	357	249	1742	3870	5236	11400	18110	1930	653	2389	2155	634
MAX	602	583	4700	5060	6500	16600	26200	6190	973	3420	3870	1320
MIN	189	121	549	2700	3390	4290	6840	667	372	882	1020	248
CFSM	.15	.10	.72	1.59	2.16	4.69	7.45	.79	.27	.98	.89	.26
IN.	.17	.11	.83	1.84	2.32	5.41	8.32	.92	.30	1.13	1.02	.29
AC-FT	21940	14840	107100	237900	301200	700700	1077000	118700	38870	146900	132500	37720

CAL YR 1983 TOTAL 998149 MEAN 2735 MAX 9570 MIN 121 CFSM 1.13 IN 15.28 AC-FT 1980000
WTR YR 1984 TOTAL 1480113 MEAN 4044 MAX 26200 MIN 121 CFSM 1.66 IN 22.66 AC-FT 2936000

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02315500 SUWANNEE RIVER AT WHITE SPRINGS, FL--Continued.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52.87	51.09	52.87	64.55	62.00	63.31	82.36	68.05	53.96	53.81	60.27	55.13
2	52.72	51.03	52.97	64.64	62.63	63.68	82.76	66.48	54.06	54.85	61.33	55.03
3	52.59	50.98	52.77	64.75	63.24	64.34	83.19	64.89	54.10	56.03	61.64	54.89
4	52.40	50.92	52.70	64.96	63.94	64.88	84.22	63.48	54.09	57.60	62.05	54.60
5	52.26	50.89	52.67	65.06	64.70	65.34	84.96	62.13	54.04	58.54	62.22	54.34
6	52.12	50.87	52.75	65.11	65.36	66.00	85.30	60.88	53.94	59.26	61.95	54.05
7	52.00	50.86	52.96	65.25	66.04	68.42	85.36	59.84	53.79	59.86	61.58	53.87
8	52.03	50.89	53.12	65.27	66.80	70.28	85.34	58.96	53.73	60.17	61.35	53.68
9	52.22	50.92	53.14	65.02	67.45	71.68	85.33	58.25	53.41	59.98	60.75	53.43
10	52.47	50.90	53.19	64.37	67.92	73.19	85.40	57.55	53.17	59.40	60.12	53.25
11	52.51	50.89	53.61	64.12	68.25	75.29	85.32	56.90	52.94	58.73	59.39	53.13
12	52.31	50.87	54.48	63.68	68.47	77.34	85.06	56.36	52.74	58.41	58.63	52.97
13	52.13	50.82	55.55	63.23	68.68	79.00	84.70	55.87	52.58	57.88	57.84	52.80
14	52.05	50.78	55.83	62.77	68.78	80.05	84.28	55.48	52.47	57.19	57.08	52.64
15	52.03	50.75	56.05	62.34	68.76	80.72	83.77	55.16	52.43	56.46	56.37	52.46
16	52.00	50.74	56.35	61.86	68.56	81.16	83.29	54.82	52.38	55.93	55.76	52.36
17	51.92	50.73	56.67	61.39	68.26	81.41	82.74	54.44	52.36	55.46	55.22	52.25
18	51.80	50.72	56.90	60.97	67.86	81.50	82.15	54.08	52.27	55.20	54.75	52.15
19	51.73	50.96	57.18	60.65	67.45	81.49	81.54	53.79	52.16	55.48	54.41	52.05
20	51.63	51.46	57.42	60.35	66.95	81.43	80.94	53.56	52.05	57.66	54.24	51.95
21	51.58	51.71	57.65	60.03	66.31	81.28	80.33	53.31	52.00	58.64	54.25	51.86
22	51.53	51.82	57.88	59.70	65.60	80.91	79.65	53.13	52.20	59.02	54.26	51.84
23	51.52	51.90	58.02	59.40	64.83	80.13	78.93	53.12	53.03	60.34	54.31	51.76
24	51.50	51.98	58.08	59.20	63.96	79.86	78.24	53.10	53.22	61.07	54.64	51.66
25	51.48	52.10	58.12	59.10	61.81	79.69	77.36	53.18	53.07	60.79	55.08	51.56
26	51.44	52.34	58.16	59.07	60.97	79.43	76.16	53.33	52.96	60.37	55.29	51.47
27	51.38	52.62	58.12	59.19	62.24	79.19	74.61	53.48	52.92	59.95	55.38	51.44
28	51.28	52.79	58.65	59.58	63.20	80.14	72.86	53.64	52.78	59.15	55.42	51.67
29	51.20	52.80	61.17	60.10	63.24	81.15	71.09	53.71	52.76	58.52	55.41	52.86
30	51.17	52.79	63.91	60.68	---	81.48	69.55	53.77	53.06	58.38	55.38	53.77
31	51.14	---	64.37	61.35	---	81.86	---	53.87	---	58.96	55.26	---
TOTAL	1609.01	1540.92	1743.21	1927.74	1904.26	2355.63	2436.79	1758.61	1590.67	1803.09	1781.63	1586.92
MEAN	51.90	51.36	56.23	62.19	65.66	75.99	81.23	56.73	53.02	58.16	57.47	52.90
MAX	52.87	52.80	64.37	65.27	68.78	81.86	85.40	68.05	54.10	61.07	62.22	55.13
MIN	51.14	50.72	52.67	59.07	60.97	63.31	69.55	53.10	52.00	53.81	54.24	51.44

CAL YR 1983 TOTAL 21114.12 MEAN 57.85 MAX 74.48 MIN 50.72
WTR YR 1984 TOTAL 22038.48 MEAN 60.21 MAX 85.40 MIN 50.72

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02315500 SUWANNEE RIVER AT WHITE SPRINGS, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT												
03...	1600	509	47	4.6	23.0	.50	7.3	.40	.03	.010	.04	.020
DEC												
13...	1545	1840	57	4.4	13.5	2.6	9.2	.40	.01	.010	.02	.010
JAN												
31...	1700	3950	64	4.7	11.0	1.0	9.8	--	.01	.010	.02	.010
APR												
30...	1545	7130	46	5.0	23.0	.50	5.8	.20	.01	.010	.02	.020
MAY												
29...	1520	1190	44	5.2	26.0	2.5	7.8	.20	.05	.010	.06	.010
JUL												
24...	1540	3400	50	4.6	25.5	.80	6.9	.30	.00	.020	.02	.010

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT												
03...	.87	.89	.93	4.1	.180	.150	500	0	500	1	<1	1
DEC												
13...	.75	.76	.78	3.5	.120	.120	--	--	--	--	--	--
JAN												
31...	.69	.70	.72	3.2	.070	.070	--	--	--	--	--	--
APR												
30...	.83	.85	.87	3.9	.110	.110	--	--	--	--	--	--
MAY												
29...	.78	.79	.85	3.8	.220	.200	--	--	--	--	--	--
JUL												
24...	.96	.97	.99	4.4	.130	.120	--	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT											
03...	890	100	790	11	9	2	0	15	<.1	1	7
DEC											
13...	--	--	--	--	--	--	--	--	--	--	--
JAN											
31...	--	--	--	--	--	--	--	--	--	--	--
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
MAY											
29...	--	--	--	--	--	--	--	--	--	--	--
JUL											
24...	--	--	--	--	--	--	--	--	--	--	--

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02315520 SWIFT CREEK AT FACIL, FL

LOCATION.--Lat 30°22'14", long 82°48'00", in SE¼ sec.27, T.1 S., R.15 E., Hamilton County, Hydrologic Unit 03110201, near right bank on downstream side of bridge on U.S. Highway 41, 0.5 mi northwest of Facil, 2.8 mi upstream from mouth, and 3.0 mi southeast of Genoa.

DRAINAGE AREA.--Indeterminate due to progressive strip mining.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1969 to April 1976 (discharge measurements only); May 1976 to current year.

REVISED RECORDS.--WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 86.43 ft National Geodetic Vertical Datum of 1929. Prior to May 20, 1976, nonrecording gage at same site and datum.

REMARKS.--Records poor. Flow regulated to some extent since 1965 by Occidential Chemical Company by control structures on Swift Creek, Altmans Bay Canal, and on an unnamed tributary. Possible interchange of water between Swift Creek, Hunter Creek, and Roaring Creek basins due to releases from diked phosphate mining area encompassing part of the three basins. Flow contains some ground water used for phosphate mining.

AVERAGE DISCHARGE.--8 years (water years 1977-82), 71.9 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 1,180 ft³/s June 27, 1972, gage height, 8.54 ft observed; since May 1976, maximum discharge, 850 ft³/s Mar. 28, 1984, gage height 7.52 ft; minimum discharge, 1.6 ft³/s Nov. 12, 1977; minimum gage height, 0.40 ft July 31, 1981, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 850 ft³/s Mar. 28, gage height, 7.52 ft; minimum daily, 3.8 ft³/s, Sept. 25, gage height, 0.46 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	39	49	180	119	104	285	61	62	97	72	24
2	72	40	47	168	109	100	276	58	66	165	81	23
3	62	38	46	158	105	98	375	55	68	151	77	26
4	32	42	46	153	110	100	697	51	67	141	71	29
5	31	34	44	145	107	102	557	49	64	130	64	29
6	39	31	45	145	104	133	461	47	58	118	58	27
7	52	30	44	137	97	203	412	46	55	107	53	23
8	51	33	49	139	91	198	378	43	52	96	51	21
9	50	34	46	127	91	187	441	47	48	85	50	21
10	50	33	43	140	79	178	424	66	46	89	48	21
11	45	32	46	162	76	170	375	63	44	86	46	16
12	49	31	70	153	75	164	338	52	41	90	42	14
13	53	29	70	146	77	154	302	45	41	78	43	13
14	50	29	70	155	80	139	275	40	60	75	36	11
15	51	32	80	156	80	108	240	35	91	72	31	8.6
16	49	38	84	158	82	108	202	33	76	69	38	6.5
17	49	33	86	151	79	107	149	33	71	66	32	5.4
18	47	30	88	144	79	105	135	30	67	64	34	5.1
19	44	30	89	148	78	94	120	29	61	106	25	7.7
20	44	47	86	151	75	88	55	29	55	127	20	8.5
21	45	62	84	146	71	85	65	27	51	123	17	5.8
22	38	49	80	141	71	85	84	28	61	128	27	5.2
23	42	46	76	142	75	88	97	48	61	129	25	7.5
24	44	51	67	155	73	87	100	47	61	124	25	5.8
25	41	71	59	155	73	82	85	67	57	107	24	3.8
26	40	62	52	155	73	78	79	52	52	98	27	4.1
27	39	56	49	162	104	189	75	58	49	87	26	4.3
28	38	58	80	156	130	712	72	84	53	82	26	35
29	40	58	190	147	105	510	72	80	49	79	24	76
30	38	51	199	140	---	348	62	67	54	79	28	74
31	37	---	185	131	---	295	---	69	---	81	26	---
TOTAL	1442	1249	2349	4646	2568	5199	7288	1539	1741	3129	1247	561.3
MEAN	46.5	41.6	75.8	150	88.6	168	243	49.6	58.0	101	40.2	18.7
MAX	80	71	199	180	130	712	697	84	91	165	81	76
MIN	31	29	43	127	71	78	55	27	41	64	17	3.8
CFSM	.71	.64	1.16	2.30	1.36	2.57	3.72	.76	.89	1.55	.62	.29
IN.	.82	.71	1.34	2.65	1.46	2.96	4.15	.88	.99	1.78	.71	.32
AC-FT	2860	2480	4660	9220	5090	10310	14460	3050	3450	6210	2470	1110

CAL YR 1983 TOTAL 32584.0 MEAN 89.3 MAX 372 MIN 21 CFSM 1.37 IN 18.56 AC-FT 64630
WTR YR 1984 TOTAL 32958.3 MEAN 90.1 MAX 712 MIN 3.8 CFSM 1.38 IN 18.78 AC-FT 65370

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02315520 SWIFT CREEK AT FACIL, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
OCT										
05...	1330	31	420	7.6	24.0	.80	5.1	4.5	4.0	1.4
DEC										
14...	1500	72	480	6.6	15.0	4.2	--	5.0	6.0	1.7
FEB										
01...	1345	118	560	6.0	10.0	6.4	12.0	>9.9	2.2	1.7
MAY										
02...	0815	57	562	6.1	23.0	55	4.8	8.3	2.6	2.7
JUL										
25...	0830	107	425	5.7	22.0	2.2	4.7	8.0	2.9	1.5
SEP										
18...	0955	5.2	608	6.8	22.0	--	5.2	--	--	2.3

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)
OCT										
05...	.200	1.6	3.40	1.0	4.4	6.0	27	10.4	10.3	320
DEC										
14...	.100	1.8	.400	1.6	2.0	3.8	17	14.0	14.0	--
FEB										
01...	.100	1.8	4.60	1.0	5.6	7.4	33	7.30	7.10	--
MAY										
02...	.490	3.2	18.0	1.0	19	22	98	5.80	5.60	--
JUL										
25...	.250	1.7	4.80	1.2	6.0	7.7	34	7.80	7.70	--
SEP										
18...	.120	2.4	3.40	.28	3.7	6.1	27	17.2	17.2	270

DATE	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT									
05...	250	70	3	1	1	270	130	140	7
DEC									
14...	--	--	--	--	--	--	--	--	--
FEB									
01...	--	--	--	--	--	--	--	--	--
MAY									
02...	--	--	--	--	--	--	--	--	--
JUL									
25...	--	--	--	--	--	--	--	--	--
SEP									
18...	170	100	2	1	1	190	--	120	1

DATE	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
05...	4	3	40	4	36	<.1	4	<3	14
DEC									
14...	--	--	--	--	--	--	--	--	21
FEB									
01...	--	--	--	--	--	--	--	--	16
MAY									
02...	--	--	--	--	--	--	--	--	19
JUL									
25...	--	--	--	--	--	--	--	--	19
SEP									
18...	0	1	50	10	40	<.1	2	11	--

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02315550 SUWANNEE RIVER AT SUWANNEE SPRINGS, FL

LOCATION.--Lat 30°23'34", long 82°56'00", in NE¼ sec.20, T.1 S., R.14 E., Suwannee County, Hydrologic Unit 03110201, on left bank 0.2 mi upstream from springs at town of Suwannee Springs, 7.5 mi north of Live Oak, and 150 mi upstream from mouth.

DRAINAGE AREA.--2,630 mi², approximately, includes part of watershed in Okefenokee Swamp, which is indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year. Prior to November 1960, six miscellaneous discharge measurements made in 1906, 1951 and 1956. November 1960 to September 1974 (gage heights and discharge measurements only).

REVISED RECORDS.--WSP 2105: WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Dec. 13, 1960 to Apr. 26, 1972 and Aug. 21, 1974 to May 8, 1980, auxiliary non-recording gage 0.3 mi downstream from base gage at same datum. Oct. 1, 1982 water stage recorder at Suwannee River at Ellaville (02319500), about 23 mi. downstream from base gage, used to determine discharge during back-water conditions.

REMARKS.--Records fair. Flow affected by backwater from Withlacoochee and Alapaha Rivers at times.

AVERAGE DISCHARGE.--10 years (water years 1975-84), 1,951 ft³/s, 10.07 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,100 ft³/s Apr. 12, 1973, gage height, 78.91 ft, from flood marks; minimum, 69 ft³/s Dec. 10, 11, 1983; minimum gage height, 37.00 ft estimated, Nov. 2, 3, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18,100 ft³/s Apr. 10; maximum gage height, 78.38 ft; minimum, 242 ft³/s Nov. 19, 20, gage height, 38.50 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	740	289	717	4820	3520	4250	11900	6480	1850	1070	2990	1390
2	685	286	706	4820	3650	4300	13000	5850	1780	1570	3440	1340
3	630	278	685	4910	3880	4400	14000	5400	1690	1930	3590	1280
4	556	273	666	4990	4180	4720	14900	4900	1600	2290	3620	1220
5	528	277	655	5010	4480	4830	15900	4450	1500	2640	3640	1150
6	496	261	660	5010	4770	5070	16700	4000	1400	2870	3680	1080
7	473	256	698	5010	5100	5850	17100	3710	1350	3100	3630	1000
8	450	260	761	4990	5510	6480	17500	3440	1300	3250	3520	932
9	449	267	783	4960	5840	7040	17300	3120	1250	3270	3340	872
10	509	269	792	4670	6110	7520	17800	2850	1200	3140	3120	828
11	579	267	808	4590	6250	7930	17600	2630	1150	2900	2910	772
12	563	264	1050	4490	6370	8300	17600	2430	1100	2730	2680	720
13	516	256	1420	4400	6470	8780	17100	2240	1250	2600	2450	678
14	491	253	1570	4240	6510	9590	16600	2090	1200	2360	2220	633
15	468	251	1620	4090	6490	10100	16000	1960	983	2110	1990	590
16	457	256	1730	3940	6410	10600	15500	1850	957	1930	1780	543
17	451	256	1810	3770	6320	11200	15000	1760	943	1750	1590	507
18	445	246	1870	3610	6170	12600	14600	1670	932	1630	1410	472
19	424	244	1970	3500	5990	13100	14100	1590	882	1730	1300	451
20	403	291	2060	3370	5780	13600	13700	1510	838	2310	1250	432
21	384	411	2110	3230	5540	13500	13300	1420	800	2900	1200	413
22	365	481	2160	3090	5290	13400	12800	1400	822	3300	1180	388
23	355	483	2220	2990	5030	13300	12600	1300	952	3600	1150	371
24	360	496	2270	2910	4720	12800	12100	1250	1050	3600	1170	355
25	359	620	2310	2840	4430	12500	11500	1200	1060	3580	1230	331
26	351	751	2350	2800	4160	12200	10900	1250	1020	3430	1340	310
27	342	762	2380	2800	4030	12000	9940	1240	962	3240	1420	301
28	325	741	2550	2880	4260	12000	8940	1370	946	3040	1430	463
29	314	731	3440	3000	4260	12500	7830	1460	925	2850	1420	727
30	306	726	4510	3170	---	12700	7060	1610	943	2680	1430	865
31	296	---	4820	3370	---	11800	---	1850	---	2730	1410	---
TOTAL	14070	11502	54151	122270	151520	296960	420870	79280	34635	82130	68530	21414
MEAN	454	383	1747	3944	5225	9644	14030	2557	1155	2649	2211	714
MAX	740	762	4820	5010	6510	13600	17800	6480	1850	3600	3680	1390
MIN	296	244	655	2800	3520	4250	7060	1200	800	1070	1150	301
CFSM	.17	.15	.66	1.50	1.99	3.67	5.34	.97	.44	1.01	.84	.27
IN.	.20	.16	.77	1.73	2.14	4.23	5.95	1.12	.49	1.16	.97	.30
AC-FT	27910	22810	107400	242500	300500	593000	834800	157300	68700	162900	135900	42470

CAL YR 1983 TOTAL 1060993 MEAN 2907 MAX 9760 MIN 244 CFSM 1.11 IN 15.01 AC-FT 2104000
WTR YR 1984 TOTAL 1359332 MEAN 3714 MAX 17800 MIN 244 CFSM 1.41 IN 19.23 AC-FT 2696000

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02315550 SUWANNEE RIVER AT SUWANNEE SPRINGS, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1956 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
OCT										
03...	1510	634	148	6.8	23.0	.40	6.7	1.1	.90	.36
DEC										
13...	1635	1480	80	5.6	13.5	1.5	9.3	2.2	.50	.15
JAN										
31...	1605	3400	75	4.6	12.0	.90	10.2	6.2	.50	.08
MAY										
02...	1015	5850	44	6.8	22.0	.90	5.2	.9	.30	.04
JUL										
23...	1410	3600	72	5.0	26.5	.30	6.9	2.0	.50	.11
SEP										
17...	1455	500	123	7.1	22.0	--	7.2	1.8	.40	.23

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)
OCT										
03...	.020	.38	.280	.82	1.1	1.5	6.6	2.00	2.00	380
DEC										
13...	.010	.16	.060	.72	.78	.94	4.2	1.10	1.00	--
JAN										
31...	.010	.09	.220	.66	.88	.97	4.3	.350	.340	--
MAY										
02...	.010	.05	.100	.90	1.0	1.1	4.6	.210	.180	--
JUL										
23...	.030	.14	.200	1.0	1.2	1.3	5.9	.600	.580	--
SEP										
17...	.020	.25	.040	.90	.94	1.2	5.3	.740	.700	280

DATE	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT									
03...	60	320	2	<1	<1	630	20	610	10
DEC									
13...	--	--	--	--	--	--	--	--	--
JAN									
31...	--	--	--	--	--	--	--	--	--
MAY									
02...	--	--	--	--	--	--	--	--	--
JUL									
23...	--	--	--	--	--	--	--	--	--
SEP									
17...	50	230	1	1	1	730	210	520	2

DATE	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
03...	8	2	20	3	17	<.1	5	4	29
DEC									
13...	--	--	--	--	--	--	--	--	37
JAN									
31...	--	--	--	--	--	--	--	--	38
MAY									
02...	--	--	--	--	--	--	--	--	35
JUL									
23...	--	--	--	--	--	--	--	--	39
SEP									
17...	0	2	30	16	14	<.1	1	14	34

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02317620 ALAPAHA RIVER NEAR JENNINGS, FL

LOCATION.--Lat 30°35'53", long 83°04'24", in SW¼ sec.1, T.2 N., R.12 E., Hamilton County, Hydrologic Unit 03110202, near left bank on downstream side of bridge on State Highway 150, 150 ft upstream from Southern Railroad bridge, 1,400 ft downstream from Apalahoochee River, 1.5 mi south of Florida-Georgia State line, and 1.6 mi southeast of Jennings, and 20.1 mi upstream from mouth.

DRAINAGE AREA.--1,680 mi², approximately.

PERIOD OF RECORD.--July 1976 to Sept. 30, 1984, (discontinued as a continuous-record station; converted to a partial-record station). Prior to July 28, 1976 (one miscellaneous discharge measurement in 1923, three in 1928 and six made by Suwannee River Water Management District in 1976).

GAGE.--Water-stage recorder. Datum of gage is 58.22 ft National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to August 18, 1938, nonrecording gage at site 150 ft downstream at datum unknown.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--8 years, (water years 1977-84) 1,641 ft³/s, 13.26 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,100 ft³/s Mar. 29, 1984, gage height, 31.74 ft; minimum, 39 ft³/s Oct. 20-22, 1982, gage height, 3.32 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum measured discharge, 17,900 ft³/s May 2, 1928, gage height not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage ght (ft)
Dec. 31	----	[a]4,300	-----	May 3	1500	5,150	17.30
Feb. 7	0500	11,900	28.30	May 18	0500	3,230	12.80
Mar. 1	0300	6,870	22.04	June 10	1700	1,920	9.44
Mar. 10	2400	16,000	30.93	Aug. 13	----	2,000	----
Mar. 29	1700	*17,100	*31.74				

a Estimated

Minimum discharge, 63 ft³/s Nov. 7, gage height, 3.53 ft.

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02317620 ALAPAHA RIVER NEAR JENNINGS, FL--Continued.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	72	220	4300	7520	7170	11600	4330	780	408	1200	423
2	103	70	220	4250	7550	6450	10300	4850	860	385	1300	426
3	100	69	250	4200	7760	5530	9350	5120	980	417	1300	405
4	99	69	300	4150	8390	4890	9850	5030	1100	524	1300	359
5	97	67	360	4100	9610	4570	11100	4430	1250	515	1200	321
6	102	66	440	4000	11200	5110	10900	3420	1450	569	1200	284
7	103	65	560	3900	11700	10300	9950	2460	1560	622	1300	253
8	100	70	660	3800	11200	13900	9060	1820	1710	639	1400	233
9	97	76	800	3700	10300	14000	8590	1470	1850	650	1500	219
10	99	81	980	3600	9400	15400	8050	1300	1900	656	1650	202
11	108	81	1200	3480	8660	15600	7690	1350	1890	690	1800	189
12	122	78	1350	3430	7990	14700	7240	1500	1750	690	1900	180
13	114	75	1500	3320	7130	14400	6540	1700	1460	660	2000	171
14	139	73	1600	3140	6140	14300	5760	2010	1100	610	1900	169
15	147	72	1650	2900	5130	13600	5130	2410	791	530	1700	164
16	125	75	1750	2620	4330	12400	4670	2830	612	500	1450	162
17	113	73	1800	2360	3780	11300	4310	3130	486	450	1100	156
18	102	69	2000	2170	3380	10300	4040	3190	402	570	890	147
19	96	68	2300	2110	3090	9540	3810	2950	340	780	700	139
20	93	80	2600	2050	2890	8810	3580	2440	294	1000	553	130
21	93	92	3100	1980	2730	8290	3280	2050	263	1400	602	124
22	91	81	3500	1900	2640	7610	2890	1650	396	1700	586	119
23	93	86	3800	1870	2670	6530	2620	1300	365	1850	499	113
24	93	180	4000	1940	2660	5270	2450	1000	307	1950	566	108
25	102	220	3900	2200	2590	4470	2140	820	291	2000	636	103
26	103	230	3700	2580	2490	4110	1940	700	284	1800	674	100
27	91	250	3550	4340	3420	4850	1980	620	261	1600	755	96
28	84	240	3400	6240	5680	9990	2280	690	248	1450	828	143
29	79	230	3900	7510	6870	16100	2870	740	273	1300	726	202
30	76	220	4200	7820	---	15400	3620	770	323	1200	582	156
31	73	---	4300	7670	---	13100	---	790	---	1100	471	---
TOTAL	3143	3278	63890	113630	178900	307990	177590	68870	25576	29215	34268	5996
MEAN	101	109	2061	3665	6169	9935	5920	2222	853	942	1105	200
MAX	147	250	4300	7820	11700	16100	11600	5120	1900	2000	2000	426
MIN	73	65	220	1870	2490	4110	1940	620	248	385	471	96
CFSM	.06	.07	1.23	2.18	3.67	5.91	3.52	1.32	.51	.56	.66	.12
IN.	.07	.07	1.41	2.52	3.96	6.82	3.93	1.52	.57	.65	.76	.13
AC-FT	6230	6500	126700	225400	354800	610900	352200	136600	50730	57950	67970	11890

CAL YR 1983 TOTAL 885486 MEAN 2426 MAX 10700 MIN 65 CFSM 1.44 IN 19.61 AC-FT 1756000
WTR YR 1984 TOTAL 1012346 MEAN 2766 MAX 16100 MIN 65 CFSM 1.65 IN 22.42 AC-FT 2008000

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02317620 ALAPAHA RIVER NEAR JENNINGS, FL--Continued.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.82	3.59		---	22.42	21.69	28.04	15.43	---	5.09	---	5.14
2	3.80	3.58		---	22.47	20.13	26.81	16.63	---	5.01	---	5.15
3	3.78	3.57		---	22.90	18.15	25.69	17.22	---	5.13	---	5.08
4	3.77	3.57		---	24.15	16.71	26.31	17.03	---	5.47	---	4.92
5	3.76	3.56		---	25.97	15.98	27.59	15.67	---	5.44	---	4.78
6	3.79	3.55		---	27.73	17.20	27.41	13.26	---	5.61	---	4.64
7	3.80	3.54		---	28.19	26.74	26.44	10.87	8.44	5.77	---	4.52
8	3.78	3.58		---	27.68	29.76	25.33	9.18	8.85	5.82	---	4.44
9	3.76	3.62		---	26.76	29.78	24.49	8.18	9.24	5.85	---	4.38
10	3.77	3.65		---	25.74	30.59	23.49	7.70	9.39	5.87	---	4.31
11	3.83	3.65		13.41	24.66	30.74	22.77	7.83	9.35	---	---	4.25
12	3.92	3.63		13.29	23.36	30.22	21.85	8.26	8.97	---	---	4.21
13	3.87	3.61		13.03	21.61	30.04	20.32	8.85	8.17	---	---	4.17
14	4.02	3.60		12.59	19.47	29.99	18.66	9.68	7.09	---	---	4.16
15	4.06	3.59		11.98	17.25	29.54	17.26	10.75	6.25	---	---	4.14
16	3.94	3.61		11.28	15.43	28.72	16.20	11.81	5.74	---	---	4.13
17	3.86	3.60		10.62	14.13	27.82	15.37	12.56	5.35	---	---	4.10
18	3.79	3.57		10.11	13.16	26.85	14.74	12.70	5.07	---	---	4.06
19	3.75	4.01		9.95	12.47	25.92	14.21	12.10	4.85	---	---	4.02
20	3.73	---		9.80	11.97	25.01	13.66	11.00	4.68	---	5.56	3.97
21	3.73	---		9.59	11.57	23.99	12.92	---	4.56	---	5.71	3.93
22	3.72	---		9.39	11.33	22.58	11.97	---	5.05	---	5.66	3.90
23	3.73	---		9.31	11.40	20.29	11.29	---	4.93	---	5.39	3.86
24	3.73	---		9.49	11.39	17.56	10.84	---	4.73	---	5.59	3.83
25	3.79	---		10.18	11.21	15.75	10.02	---	4.67	---	5.81	3.80
26	3.80	---		11.17	10.94	14.92	9.48	---	4.64	---	5.92	3.78
27	3.72	---		15.43	13.25	16.54	9.61	---	4.55	---	6.15	3.75
28	3.67	---		19.64	18.47	26.39	10.41	---	4.51	---	6.35	4.02
29	3.64	---		22.40	21.04	30.98	11.92	---	4.60	---	6.07	4.31
30	3.62	---		23.04	---	30.63	13.75	---	4.78	---	5.65	4.10
31	3.60	---		22.72	---	29.22	---	---	---	---	5.30	---
TOTAL	117.35	---		---	548.12	760.43	548.85	---	---	---	---	127.85
MEAN	3.79	---		---	18.90	24.53	18.30	---	---	---	---	4.26
MAX	4.06	---		---	28.19	30.98	28.04	---	---	---	---	5.15
MIN	3.60	---		---	10.94	14.92	9.48	---	---	---	---	3.75

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02319000 WITHLACOOCHEE RIVER NEAR PINETTA, FL

LOCATION.--Lat 30°35'43", long 83°15'35", in NW¼ sec.7, T.2 N., R.11 E., Madison County, Hydrologic Unit 03110203, on right bank 30 ft downstream from bridge, 0.1 mi downstream from small tributary, 0.3 mi west of Bellville, 5.6 mi east of Pinetta, and 22 mi upstream from mouth.

DRAINAGE AREA.--2,120 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only for October and November 1931, published in WSP 1304.

REVISED RECORDS.--WSP 972: 1941-42. WSP 1905: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 47.21 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 11, 1931 to Dec. 3, 1941, nonrecording gage at same site and datum. Dec. 3, 1941 to Aug. 2, 1972, water-stage recorder at same site and datum.

REMARKS.--Records fair. Flow affected by backwater from Suwannee River Mar. 15 to Apr. 27.

AVERAGE DISCHARGE.--53 years, 1,695 ft³/s, 10.86 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 79,400 ft³/s Apr. 5, 1948, gage height, 38.64 ft from flood marks; minimum, 70 ft³/s Aug. 23, 1955, gage height, 6.27 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1928 reached a stage of 36.75 ft from floodmarks, discharge, 53,600 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 42,40^ ft³/s Mar. 11; maximum gage height, 36.20 ft, from floodmarks; minimum daily, 165 ft³/s Nov. 18-19, gage height, 6.70 ft observed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	405	180	1340	4610	11100	6600	11300	8350	1060	582	2510	1310
2	396	170	1310	4850	14400	6660	8550	8810	1090	522	2840	1180
3	383	173	1310	5190	16800	6730	5800	8470	1040	577	3320	1010
4	360	175	1440	5340	17000	6850	5230	7270	1020	753	3980	775
5	340	175	1550	5390	15800	7010	9440	4550	996	858	4280	714
6	320	175	1520	5380	14400	7820	6960	2550	1360	1060	4160	626
7	292	180	1670	5220	12500	10200	5090	1890	1450	1070	3860	615
8	268	180	1660	4840	10800	14600	6130	1590	1320	1060	3480	544
9	244	180	1630	4550	9910	23800	8860	1440	1190	978	3250	455
10	229	180	1610	3610	9030	36900	7330	1320	870	834	2920	527
11	360	175	1630	2920	8080	42400	6170	1200	659	698	2410	560
12	344	175	2260	2500	7440	37000	5280	1320	560	648	1770	549
13	313	175	2920	2290	6580	27600	4130	1420	480	555	1350	527
14	303	173	3350	2150	5620	22900	3660	1400	425	500	1090	485
15	378	175	3640	2060	4650	18800	3240	1250	450	470	725	445
16	296	175	3650	1980	4270	10600	2800	1130	445	538	692	396
17	244	170	3610	1950	3850	6720	2230	1040	430	681	990	396
18	226	165	3780	1940	3590	4810	1760	936	392	665	1060	332
19	226	165	4040	1960	3400	3840	1480	828	383	816	1070	310
20	217	173	4530	2060	3380	2260	1110	736	348	1330	1060	310
21	208	235	4820	2130	3300	1410	988	681	344	1450	1100	313
22	196	320	5430	2150	3190	1340	933	648	425	1590	1320	313
23	196	369	5800	2270	3120	1460	1030	626	410	1690	1460	271
24	190	615	5670	2480	3040	1680	1150	610	405	1660	1370	264
25	196	1060	5220	2840	2850	1930	1270	720	356	1700	1440	264
26	196	1480	4440	3330	2640	2340	1560	670	332	1790	1710	264
27	190	1580	3720	4350	2850	2980	2350	648	455	1800	1850	257
28	183	1400	3230	5230	4750	6220	3780	670	500	1840	1860	257
29	183	1360	3160	6380	6250	8730	5370	798	511	1810	1790	271
30	183	1390	3760	7030	---	13200	7150	912	544	1750	1550	261
31	183	---	4230	8510	---	13100	---	972	---	1990	1390	---
TOTAL	8248	13298	97930	117490	214790	358490	133131	65455	20250	34265	63657	14801
MEAN	266	443	3159	3790	7407	11560	4438	2111	675	1105	2053	493
MAX	405	1580	5800	8510	17000	42400	11300	8810	1450	1990	4280	1310
MIN	183	165	1310	1940	2640	1340	933	610	332	470	692	257
CFSM	.13	.21	1.49	1.79	3.49	5.45	2.09	1.00	.32	.52	.97	.23
IN.	.14	.23	1.72	2.06	3.77	6.29	2.34	1.15	.36	.60	1.12	.26
AC-FT	16360	26380	194200	233000	426000	711100	264100	129800	40170	67960	126300	29360

CAL YR 1983 TOTAL 1027383 MEAN 2815 MAX 18700 MIN 165 CFSM 1.33 IN 18.03 AC-FT 2038000
WTR YR 1984 TOTAL 1141805 MEAN 3120 MAX 42400 MIN 165 CFSM 1.47 IN 20.04 AC-FT 2265000

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02319000 WITHLACOOCHEE RIVER NEAR PINETTA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1962 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)
OCT										
03...	1130	292	260	7.7	22.0	2.5	5.7	1.4	.25	.010
DEC										
13...	1030	2960	85	6.6	12.5	15	8.6	2.6	.13	.010
JAN										
31...	1010	8330	48	6.6	10.5	9.0	8.7	3.2	.05	.010
MAY										
01...	1405	8360	46	6.6	22.0	.33	6.8	1.9	.05	.020
29...	1145	792	159	6.1	24.5	5.7	5.4	.8	.55	.010
JUL										
23...	1215	1690	130	5.9	24.0	10	6.2	2.2	.23	.020

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)
OCT									
03...	.26	.080	.54	.62	.88	3.9	.170	.170	240
DEC									
13...	.14	.040	.68	.72	.86	3.8	.160	.110	--
JAN									
31...	.06	.020	.36	.38	.44	1.9	.080	.070	--
MAY									
01...	.07	.040	.81	.85	.92	4.1	.150	.150	--
29...	.56	.070	.31	.38	.94	4.2	.200	.170	--
JUL									
23...	.25	.030	.73	.76	1.0	4.5	.180	.130	--

DATE	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
OCT									
03...	110	130	4	1	1	510	120	390	9
DEC									
13...	--	--	--	--	--	--	--	--	--
JAN									
31...	--	--	--	--	--	--	--	--	--
MAY									
01...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
JUL									
23...	--	--	--	--	--	--	--	--	--

DATE	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
03...	5	4	30	8	22	<.1	2	9	12
DEC									
13...	--	--	--	--	--	--	--	--	16
JAN									
31...	--	--	--	--	--	--	--	--	16
MAY									
01...	--	--	--	--	--	--	--	--	14
29...	--	--	--	--	--	--	--	--	6.2
JUL									
23...	--	--	--	--	--	--	--	--	14

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02319500 SUWANNEE RIVER AT ELLAVILLE, FL

LOCATION.--Lat 30°23'04", long 83°10'19", in NE¼ sec.24, T.1 S., R.11 E., Suwannee County, Hydrologic Unit 03110205, on left bank at Ellaville, 100 ft upstream from Seaboard Air Line Railroad bridge, 200 ft downstream from Withlacoochee River, 900 ft upstream from bridge on U.S. Highway 90, and 127 mi upstream from mouth.

DRAINAGE AREA.--6,970 mi², approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

PERIOD OF RECORD.--January 1927 to current year.

REVISED RECORDS.--WSP 1905: WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 27.22 ft National Geodetic Vertical Datum of 1929. Prior to June 20, 1932, nonrecording gage at same site and datum. Nov. 8, 1955 to Sept. 30, 1970, nonrecording gage 1.1 mi downstream from base gage at datum 2.67 ft lower, used as supplementary gage when flow was less than 4,800 ft³/s.

REMARKS.--Records good. Since Nov. 7, 1953, slight regulation at low water caused by diversions above control 0.7 mi downstream from gage by a steam-electric powerplant for cooling of condensers. Total diverted flow is returned to river below control. Records include flow of large spring on left bank about 200 ft downstream; spring flow may reverse during high stages.

AVERAGE DISCHARGE.--57 years, 6,580 ft³/s, 12.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 95,300 ft³/s Apr. 7,8, 1948, gage height, 40.88 ft, from flood marks; minimum, 882 ft³/s July 17, 1955; minimum gage height, 1.56 ft Dec. 1, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 50,500 ft³/s Apr. 9, gage height, 33.50 ft; minimum, 1,910 ft³/s Nov. 19, 20, gage height, 2.51 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3060	2110	3580	12100	16200	15700	38300	21600	7130	4290	8300	5770
2	2960	2090	3570	12600	17900	16300	40400	21900	7080	4510	8650	5590
3	2860	2070	3570	13000	19400	16500	42000	21900	6980	4800	9100	5390
4	2760	2070	3620	13300	20500	16500	44000	1500	6910	5170	9520	5170
5	2700	2060	3680	13500	21500	16500	45100	.0400	6850	5570	9890	4930
6	2630	2040	3730	13700	22100	16800	46600	18700	6800	5890	10100	4690
7	2590	2020	3760	13700	22600	18100	48100	17100	6700	6120	10200	4470
8	2550	2020	3880	13600	22800	20600	49200	15700	6600	6300	10200	4270
9	2540	2020	3960	13400	22800	23400	50200	14400	6500	6410	10000	4120
10	2540	2020	4000	13200	22600	25800	50300	13400	6400	6400	9790	4020
11	2600	2010	4160	12700	22300	29000	49900	12500	6300	6310	9480	3960
12	2670	1990	4580	12300	21800	36200	48900	11900	6100	6170	9060	3870
13	2630	1980	5470	12000	21200	41800	47700	11500	5900	6050	8580	3760
14	2580	1970	6120	11700	20500	45200	46000	11100	5800	5850	8140	3570
15	2550	1970	6530	11400	19600	46100	43900	10800	5600	5590	7740	3440
16	2510	1950	6820	11100	18700	45400	41400	10600	5360	5430	7340	3320
17	2450	1940	7080	10700	17900	43800	39300	10400	5140	5320	6970	3250
18	2310	1930	7340	10400	17200	41500	36800	10200	4960	5210	6640	3240
19	2230	1920	7650	10200	16600	39300	34200	9980	4790	5210	6350	3170
20	2170	2000	8060	9940	16100	36700	31700	9650	4610	5650	6110	3100
21	2130	2060	8520	9750	15600	34000	29200	9220	4460	6360	5920	3050
22	2110	2190	9110	9570	15100	31500	27900	8800	4460	6860	5870	2980
23	2250	2250	9670	9440	14600	29300	26700	8400	4420	7280	5880	2920
24	2270	2300	10100	9410	14200	28300	25600	8000	4440	7680	5790	2860
25	2250	2500	10300	9480	13700	27300	24400	7410	4390	7970	5790	2820
26	2240	3220	10200	9710	13200	26300	23400	7240	4360	8180	5940	2770
27	2220	3520	9950	10300	12900	25800	22300	6980	4340	8240	6100	2730
28	2190	3570	9750	11200	13700	26500	21600	6880	4250	8190	6230	2790
29	2160	3510	9900	12300	14800	27500	21300	6870	4220	8100	6260	2990
30	2140	3560	10700	13400	---	27500	21400	6920	4220	7970	6140	3050
31	2120	---	11500	14700	---	35300	---	7070	---	8030	5960	---
TOTAL	75970	68860	210860	363800	528100	910500	1117800	379020	166070	197110	238040	112060
MEAN	2451	2295	6802	11740	18210	29370	37260	12230	5536	6358	7679	3735
MAX	3060	3570	11500	14700	22800	46100	50300	21900	7130	8240	10200	5770
MIN	2110	1920	3570	9410	12900	15700	21300	6870	4220	4290	5790	2730
CFSM	.35	.33	.98	1.68	2.61	4.21	5.35	1.76	.79	.91	1.10	.54
IN.	.41	.37	1.13	1.94	2.82	4.86	5.97	2.02	.89	1.05	1.27	.60
AC-FT	150700	136600	418200	721600	1047000	1806000	2217000	751800	329400	391000	472200	222300

CAL YR 1983 TOTAL 3464310 MEAN 9491 MAX 27200 MIN 1920 CFSM 1.36 IN 18.49 AC-FT 6871000
WTR YR 1984 TOTAL 4368190 MEAN 11930 MAX 50300 MIN 1920 CFSM 1.71 IN 23.31 AC-FT 8664000

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02319500 SUWANNEE RIVER AT ELLAVILLE, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.46	2.67	3.90	12.72	16.43	15.98	30.58	21.32	7.48	4.53	8.78	5.97
2	3.38	2.66	3.89	13.16	17.88	16.55	31.22	21.48	7.42	4.74	9.16	5.80
3	3.30	2.64	3.90	13.52	19.14	16.73	31.67	21.48	7.31	5.02	9.65	5.59
4	3.22	2.64	3.94	13.81	20.13	16.83	32.11	21.12	7.23	5.37	10.10	5.37
5	3.16	2.63	3.99	14.03	20.88	16.92	32.36	20.17	7.17	5.77	10.50	5.13
6	3.11	2.62	4.03	14.15	21.43	17.21	32.68	18.70	7.11	6.10	10.75	4.91
7	3.07	2.60	4.06	14.17	21.77	18.42	33.00	17.26	7.00	6.35	10.83	4.70
8	3.04	2.60	4.17	14.09	21.94	20.60	33.23	15.96	6.89	6.55	10.76	4.52
9	3.03	2.60	4.24	13.91	21.93	22.90	33.44	14.83	6.78	6.68	10.61	4.38
10	3.03	2.60	4.28	13.67	21.78	24.88	33.46	13.86	6.67	6.67	10.39	4.29
11	3.08	2.59	4.41	13.28	21.52	27.26	33.37	13.07	6.55	6.56	10.07	4.23
12	3.14	2.58	4.81	12.88	21.16	29.88	33.17	12.48	6.33	6.41	9.60	4.15
13	3.11	2.56	5.68	12.57	20.70	31.60	32.91	12.08	6.11	6.27	9.08	4.06
14	3.07	2.55	6.35	12.28	20.08	32.38	32.56	11.74	6.01	6.06	8.60	3.89
15	3.04	2.55	6.82	11.99	19.34	32.57	32.10	11.44	5.81	5.79	8.15	3.78
16	3.01	2.55	7.14	11.69	18.59	32.43	31.53	11.20	5.56	5.63	7.71	3.68
17	2.96	2.53	7.42	11.36	17.90	32.06	30.85	11.02	5.34	5.52	7.30	3.63
18	2.84	2.52	7.71	11.04	17.31	31.54	30.08	10.83	5.17	5.41	6.93	3.61
19	2.77	2.51	8.06	10.76	16.78	30.86	29.23	10.59	5.01	5.41	6.61	3.55
20	2.73	2.58	8.51	10.54	16.31	30.07	28.35	10.24	4.83	5.86	6.34	3.50
21	2.70	2.64	9.02	10.35	15.87	29.18	27.45	9.78	4.69	6.63	6.13	3.46
22	2.68	2.74	9.65	10.16	15.44	28.30	26.52	9.32	4.69	7.18	6.08	3.40
23	2.79	2.79	10.27	10.02	15.02	27.52	25.64	8.89	4.65	7.64	6.09	3.35
24	2.81	2.83	10.71	9.99	14.63	26.78	24.77	8.44	4.67	8.08	5.99	3.30
25	2.79	3.00	10.88	10.06	14.20	26.05	23.87	7.78	4.63	8.41	5.99	3.27
26	2.79	3.60	10.80	10.31	13.74	25.31	22.96	7.59	4.60	8.64	6.15	3.23
27	2.77	3.85	10.55	10.87	13.47	24.91	22.10	7.31	4.58	8.70	6.33	3.19
28	2.74	3.89	10.35	11.81	14.20	25.46	21.46	7.20	4.50	8.65	6.48	3.24
29	2.72	3.84	10.50	12.83	15.23	26.23	21.15	7.19	4.47	8.55	6.51	3.40
30	2.70	3.89	11.28	13.93	---	26.23	21.17	7.25	4.48	8.41	6.38	3.45
31	2.69	---	12.12	15.07	---	29.59	---	7.41	---	8.47	6.17	---
TOTAL	91.73	84.85	223.44	381.02	524.80	793.23	874.99	389.03	173.74	206.06	250.22	122.03
MEAN	2.96	2.83	7.21	12.29	18.10	25.59	29.17	12.55	5.79	6.65	8.07	4.07
MAX	3.46	3.89	12.12	15.07	21.94	32.57	33.46	21.48	7.48	8.70	10.83	5.97
MIN	2.68	2.51	3.89	9.99	13.47	15.98	21.15	7.19	4.47	4.53	5.99	3.19

WTR YR 1984 TOTAL 4115.14 MEAN 11.24 MAX 33.46 MIN 2.51

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02320500 SUWANNEE RIVER AT BRANFORD, FL
(National stream-quality accounting network station)

LOCATION.--Lat 29°57'20", long 82°55'40", in NE¼ sec.20, T.6 S., R.14 E., Suwannee County, Hydrologic Unit 03110205, near left bank on upstream side of bridge on U.S. Highway 27 at Branford, 10.2 mi upstream from Santa Fe River and 75 mi upstream from mouth.

DRAINAGE AREA.--7,880 mi², includes part of watershed in Okefenokee Swamp which is indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1931 to current year.

REVISED RECORDS.--WSP 1905: WDR FL-75-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 4.81 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--53 years, 7,043 ft³/s, 12.14 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 83,900 ft³/s Apr. 11, 1948, gage height, 34.07 ft; minimum, 1,530 ft³/s July 1, 2, 1955; minimum gage height, 1.97 ft observed, Jan. 10, 11, 14, 17, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1928 reached a stage of 32.0 ft from floodmark; discharge, 65,000 ft³/s computed on basis of measured crest flow at Ellaville (station 02319500).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 41,400 ft³/s Apr. 13, gage height, 28.88 ft observed; minimum daily, 2,870 ft³/s Nov. 18, gage height, 5.27 ft observed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4290	3120	3970	10800	13600	15800	29500	25100	9700	6570	9610	7510
2	4280	3100	4000	11300	14500	16300	30300	24800	9670	6520	9780	7370
3	4080	3090	4020	11900	15500	16800	31800	24600	9590	6620	9980	7220
4	4000	3080	4070	12400	16600	17200	32200	24500	9480	6750	10300	7060
5	3920	3100	4050	12800	17500	17500	35200	24100	9310	6900	10500	6910
6	3840	3060	4060	13200	18400	17700	36100	23500	9260	7110	10800	6730
7	3770	3030	4070	13400	19000	18200	36800	22300	9210	7360	11000	6510
8	3710	3040	4080	13500	19600	18900	37600	21100	9170	7520	11100	6330
9	3680	3030	4140	13600	20000	20100	38800	19800	9130	7690	11100	6160
10	3640	3010	4190	13600	20300	21500	39800	18600	9020	7750	11000	6030
11	3620	3000	4270	13500	20500	23100	40600	17400	8850	7770	10900	5910
12	3620	2970	4470	13300	20600	24300	41200	16400	8720	7760	10800	5830
13	3640	2950	4660	13100	20600	25900	41400	15500	8560	7650	10500	5740
14	3630	2940	5130	12900	20400	27800	41400	14900	8390	7560	10100	5650
15	3580	2920	5510	12700	20100	29600	41300	14400	8220	7460	9800	5540
16	3550	2950	5860	12500	19700	31400	40900	13900	8000	7290	9470	5410
17	3520	2900	6130	12200	19200	33100	40200	13600	7730	7200	9160	5320
18	3510	2870	6430	12100	18700	34300	39300	13200	7520	7210	8860	5180
19	3470	2880	6690	12200	18200	35000	38300	12900	7400	7220	8620	5100
20	3430	2990	6980	11600	17700	35200	37100	12700	7270	7230	8350	5040
21	3410	3020	7270	11300	17300	35100	35600	12300	7080	7430	8110	4950
22	3360	2990	7660	11200	17000	34100	34400	11900	7020	7810	7900	4880
23	3340	3020	8090	11000	16500	33100	33000	11600	6910	8170	7800	4840
24	3330	3120	8500	10900	16100	32000	31700	11200	6830	8440	7730	4770
25	3310	3210	8820	10800	15700	30700	30200	10900	6750	8780	7610	4690
26	3270	3270	9060	10800	15300	29900	29200	10600	6720	9070	7580	4630
27	3240	3600	9170	10900	14900	29400	28200	10300	6640	9290	7600	4570
28	3210	3830	9260	11200	15200	29000	27100	10000	6560	9440	7660	4520
29	3190	3930	9540	11700	15300	28600	26300	9910	6530	9500	7720	4670
30	3160	3930	9690	12200	---	28400	25500	9870	6550	9490	7720	4660
31	3110	---	10100	12900	---	28800	---	9740	---	9580	7640	---
TOTAL	110710	93950	193940	377500	514000	818800	1051000	491620	241790	242140	286800	169730
MEAN	3571	3132	6256	12180	17720	26410	35030	15860	8060	7811	9252	5658
MAX	4290	3930	10100	13600	20600	35200	41400	25100	9700	9580	11100	7510
MIN	3110	2870	3970	10800	13600	15800	25500	9740	6530	6520	7580	4520
CFSM	.45	.40	.79	1.55	2.25	3.35	4.45	2.01	1.02	.99	1.17	.72
IN.	.52	.44	.92	1.78	2.43	3.87	4.96	2.32	1.14	1.14	1.35	.80
AC-FT	219600	186300	384700	748800	1020000	1624000	2085000	975100	479600	480300	568900	336700

CAL YR 1983 TOTAL 3663420 MEAN 10040 MAX 26900 MIN 2870 CFSM 1.27 IN 17.29 AC-FT 7266000
WTR YR 1984 TOTAL 4591980 MEAN 12550 MAX 41400 MIN 2870 CFSM 1.59 IN 21.69 AC-FT 9108000

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02320500 SUWANNEE RIVER AT BRANFORD, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.55	5.71	7.09	14.28	16.65	18.20	25.55	23.55	13.15	9.83	13.06	10.89
2	7.53	5.67	7.14	14.78	17.36	18.52	25.93	23.40	13.12	9.77	13.22	10.73
3	7.26	5.66	7.17	15.26	18.05	18.83	26.40	23.31	13.04	9.88	13.42	10.57
4	7.14	5.64	7.25	15.69	18.72	19.06	26.52	23.24	12.93	10.03	13.70	10.39
5	7.01	5.67	7.22	16.02	19.32	19.21	27.37	23.06	12.76	10.20	13.95	10.22
6	6.90	5.61	7.24	16.31	19.82	19.38	27.61	22.73	12.71	10.44	14.19	10.01
7	6.78	5.55	7.25	16.51	20.23	19.64	27.81	22.10	12.66	10.72	14.37	9.76
8	6.68	5.56	7.26	16.59	20.57	20.04	28.03	21.41	12.62	10.90	14.46	9.54
9	6.63	5.54	7.34	16.64	20.81	20.71	28.29	20.67	12.58	11.08	14.48	9.34
10	6.57	5.51	7.42	16.63	20.97	21.51	28.53	19.95	12.47	11.15	14.40	9.18
11	6.53	5.49	7.52	16.55	21.08	22.38	28.70	19.22	12.30	11.17	14.32	9.04
12	6.54	5.44	7.78	16.39	21.13	22.99	28.82	18.58	12.17	11.16	14.17	8.94
13	6.58	5.40	8.02	16.23	21.12	23.80	28.88	18.04	12.00	11.04	13.90	8.83
14	6.56	5.38	8.60	16.05	21.03	24.65	28.87	17.63	11.83	10.94	13.58	8.72
15	6.47	5.36	9.06	15.87	20.84	25.41	28.85	17.27	11.65	10.83	13.24	8.58
16	6.43	5.40	9.46	15.69	20.60	26.08	28.77	16.88	11.42	10.64	12.92	8.42
17	6.38	5.32	9.76	15.50	20.33	26.58	28.61	16.63	11.13	10.54	12.61	8.30
18	6.36	5.27	10.09	15.39	20.00	26.90	28.40	16.33	10.90	10.56	12.31	8.12
19	6.30	5.28	10.37	15.46	19.73	27.08	28.18	16.10	10.77	10.57	12.06	8.02
20	6.24	5.48	10.68	14.91	19.44	27.12	27.88	15.88	10.62	10.58	11.78	7.94
21	6.19	5.53	10.98	14.68	19.20	27.08	27.49	15.58	10.41	10.80	11.53	7.82
22	6.11	5.48	11.38	14.52	18.98	26.83	27.14	15.22	10.34	11.21	11.31	7.73
23	6.09	5.53	11.81	14.34	18.69	26.57	26.74	14.93	10.22	11.59	11.20	7.68
24	6.07	5.70	12.21	14.27	18.39	26.28	26.35	14.59	10.12	11.88	11.12	7.58
25	6.03	5.86	12.52	14.19	18.13	25.91	25.89	14.27	10.03	12.23	11.00	7.48
26	5.96	5.97	12.74	14.19	17.87	25.62	25.43	14.00	10.00	12.52	10.96	7.40
27	5.92	6.50	12.84	14.29	17.65	25.42	24.97	13.70	9.91	12.74	10.98	7.31
28	5.86	6.88	12.93	14.58	17.80	25.29	24.51	13.45	9.82	12.89	11.05	7.25
29	5.82	7.04	13.19	14.98	17.89	25.12	24.10	13.35	9.78	12.95	11.11	7.45
30	5.78	7.04	13.33	15.45	---	25.08	23.74	13.31	9.80	12.94	11.11	7.44
31	5.69	---	13.73	16.03	---	25.25	---	13.19	---	13.03	11.03	---
TOTAL	199.96	171.47	301.38	478.27	562.40	732.54	814.36	551.57	343.26	346.81	392.54	260.68
MEAN	6.45	5.72	9.72	15.43	19.39	23.63	27.15	17.79	11.44	11.19	12.66	8.69
MAX	7.55	7.04	13.73	16.64	21.13	27.12	28.88	23.55	13.15	13.03	14.48	10.89
MIN	5.69	5.27	7.09	14.19	16.65	18.20	23.74	13.19	9.78	9.77	10.96	7.25

CAL YR 1983 TOTAL 4533.64 MEAN 12.42 MAX 24.40 MIN 5.19
WTR YR 1984 TOTAL 5155.24 MEAN 14.09 MAX 28.88 MIN 5.27

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02320500 SUWANNEE RIVER AT BRANFORD, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1954 to September 1957, October 1962 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 27...	1115	3240	318	7.8	21.0	1.4	8.1	--	.3	220	36	160
JAN 27...	1100	10900	140	7.3	12.5	4.6	7.0	66	--	60	47	57
APR 18...	1645	39100	52	6.4	17.5	2.5	4.8	51	--	K16	28	20
AUG 23...	1515	7780	265	7.5	23.5	3.2	5.0	59	--	180	58	110

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT 27...	25	49	9.3	5.3	7	.2	.60	136	4.2	23	6.0	.20
JAN 27...	11	17	3.5	6.0	18	.4	1.0	46	4.5	14	8.9	.10
APR 18...	8	5.9	1.3	2.8	22	.3	.80	12	9.3	3.5	5.3	.10
AUG 23...	9	35	6.0	5.0	9	.2	.80	103	6.3	13	6.5	.20

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)
OCT 27...	8.1	200	180	.27	1750	<.010	1.1	1.1	.120	.070	.09
JAN 27...	6.8	112	86	.15	3300	--	--	.50	--	.170	.22
APR 18...	3.6	30	33	.04	3170	--	--	.19	--	.120	.15
AUG 23...	6.9	151	140	.21	3170	--	--	.94	--	.070	.09

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)
OCT 27...	.38	.50	1.6	7.1	.340	1.0	.350	.270	.310	.95	130
JAN 27...	--	1.0	--	--	.210	.64	.160	--	.140	.43	--
APR 18...	--	2.3	--	--	.480	1.5	.470	--	.450	1.4	--
AUG 23...	--	.80	--	--	.250	--	.190	--	.190	.58	--

DATE	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT 27...	80	50	1	1	13	<.5	1	<1	<1	<3	3
JAN 27...	--	200	--	1	25	<.5	--	<1	<1	<3	1
APR 18...	--	300	--	1	16	<.5	--	2	<1	<3	1
AUG 23...	--	100	--	1	18	<.0	--	<1	<1	<3	1

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02320500 SUWANNEE RIVER AT BRANFORD, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)
OCT 27...	220	130	87	2	<4	10	4	6	.3	.3	<10
JAN 27...	--	--	260	3	<4	--	--	11	--	<.1	<10
APR 18...	--	--	640	1	<4	--	--	21	--	<.1	<10
AUG 23...	--	--	280	1	<4	--	--	8	--	<.1	<10

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 27...	<1	8	<1	<1	91	<6	3	5.2	13	114	31
JAN 27...	--	3	<1	<1	31	<6	10	--	10	294	40
APR 18...	--	4	<1	<1	13	<6	13	--	21	2220	14
AUG 23...	--	2	<1	<1	62	<6	9	--	10	210	50

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02320700 SANTA FE RIVER NEAR GRAHAM, FL

LOCATION.--Lat 29°50'46", long 82°13'11", in NE¼ sec.32, T.7 S., R.21 E., Alachua County, Hydrologic Unit 03110206, near left bank on upstream side of bridge on State Highway 225, 1.0 mi south of Graham, 1.5 mi upstream from Sampson River, and 71 mi upstream from mouth.

DRAINAGE AREA.--94.9 mi².

PERIOD OF RECORD.--August 1957 to current year.

REVISED RECORDS.--WSP 2105: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 103.55 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Records do not include diversions during periods of high stages from Santa Fe Lake through Lochloosa Creek in St. Johns River basin.

AVERAGE DISCHARGE.--27 years, 58.4 ft³/s, 8.36 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,360 ft³/s Sept. 12, 1964, gage height, 14.97 ft; minimum, 0.02 ft³/s June 1, 1981, gage height, 2.72 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 29	1800	*654	*12.37	Apr. 4	1400	437	11.25

Minimum discharge, 1.8 ft³/s June 14, 15, 18, gage height, 3.20 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	8.8	53	477	73	248	172	32	11	17	61	25
2	29	7.4	48	388	68	216	151	30	9.6	18	47	22
3	24	6.3	45	325	64	189	155	27	8.1	17	37	19
4	20	5.3	43	279	63	167	397	26	6.7	17	31	17
5	16	6.2	41	239	61	147	359	25	5.8	17	27	16
6	13	8.6	44	203	58	139	360	23	4.5	15	26	14
7	11	7.8	48	174	54	187	337	22	4.0	14	22	14
8	8.1	11	44	153	52	182	301	21	3.4	13	18	13
9	9.4	11	41	136	50	179	261	19	2.9	15	16	11
10	20	10	40	125	48	166	223	16	2.6	22	13	13
11	19	9.4	60	117	46	148	192	15	2.3	15	12	12
12	24	8.1	180	108	44	133	166	14	2.3	15	11	11
13	21	7.2	157	104	48	126	145	13	2.0	14	9.6	9.6
14	24	6.2	177	100	63	117	129	11	1.9	14	12	8.1
15	30	5.4	197	95	62	108	118	9.9	2.1	14	17	7.0
16	37	4.9	184	91	62	100	106	8.6	2.5	14	26	5.8
17	36	4.2	164	88	61	93	96	7.4	2.1	13	11	5.3
18	33	3.7	148	87	58	87	87	6.5	1.9	13	8.1	5.6
19	30	3.4	135	88	55	81	80	5.8	2.3	14	7.0	8.6
20	26	29	119	85	52	76	73	5.4	2.7	15	7.4	7.4
21	24	70	108	83	56	72	66	4.6	2.7	20	14	6.0
22	22	51	97	81	124	67	61	4.1	3.6	23	22	4.9
23	26	61	88	78	237	63	57	5.1	4.4	46	33	4.4
24	24	69	81	82	224	59	55	8.3	3.7	56	40	3.7
25	22	79	73	91	226	56	51	9.1	4.4	50	33	3.2
26	20	70	63	97	199	53	48	11	6.2	46	41	2.8
27	18	67	57	98	201	95	44	13	6.2	41	37	2.6
28	16	67	53	95	281	202	41	14	6.0	39	33	2
29	14	64	388	90	259	199	38	14	7.8	37	32	40
30	12	59	528	85	---	215	34	14	14	39	30	33
31	10	---	545	80	---	196	---	13	---	52	27	---
TOTAL	673.5	820.9	4047	4422	2949	4166	4403	447.8	139.7	755	761.1	368.0
MEAN	21.7	27.4	131	143	102	134	147	14.4	4.66	24.4	24.6	12.3
MAX	37	79	545	477	281	248	397	32	14	56	61	40
MIN	8.1	3.4	40	78	44	53	34	4.1	1.9	13	7.0	2.6
CFSM	.23	.29	1.38	1.51	1.08	1.41	1.55	.15	.05	.26	.26	.13
IN.	.26	.32	1.59	1.73	1.16	1.63	1.73	.18	.05	.30	.30	.14
AC-FT	1340	1630	8030	8770	5850	8260	8730	888	277	1500	1510	730

CAL YR 1983	TOTAL	23277.5	MEAN 63.8	MAX 545	MIN 3.4	CFSM .67	IN 9.12	AC-FT	46170	
WTR YR 1984	TOTAL	23953.0	MEAN 65.4	MAX 545	MIN 1.9	CFSM .69	IN 9.39	AC-FT	47510	

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02321500 SANTA FE RIVER AT WORTHINGTON SPRINGS, FL
(National stream-quality accounting network station)

LOCATION.--Lat 29°55'18", long 82°25'35", in SE¼ sec.32, T.6 S., R.19 E., Alachua County, Hydrologic Unit 03110206, near center of span on downstream side of bridge on State Highway 121, 0.5 mi south of Worthington Springs, 0.8 mi downstream from New River, and 51 mi upstream from mouth.

DRAINAGE AREA.--575 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1931 to current year. Published as "near Worthington" prior to October 1965. Monthly discharge only for October 1931, published in WSP 1304.

REVISED RECORDS.--WSP 2105: WDR FL-76-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 42.74 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Jan. 16, 1939, nonrecording gage at site 0.2 mi downstream at present datum and Jan. 16, 1939, to July 23, 1953, nonrecording gage at present site and datum.

REMARKS.--Records good. Records do not include diversions, during periods of high stages from Santa Fe Lake through Lochloosa Creek in St. Johns River basin.

AVERAGE DISCHARGE.--53 years, 444 ft³/s, 10.49 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft³/s Sept. 13, 1964, gage height, 28.40 ft; minimum, 0.50 ft³/s June 24, 1955, gage height, 6.74 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,840 ft³/s Apr. 6, gage height, 19.89 ft; minimum, 20 ft³/s June 20, gage height, 7.44 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	357	110	584	4650	998	3170	3420	256	166	96	812	261
2	293	99	496	4490	835	2680	2720	235	141	104	1250	224
3	244	92	423	3890	716	2230	2200	215	109	103	1230	182
4	208	85	367	3110	627	1860	3180	201	88	90	1000	139
5	180	96	334	2460	558	1560	4310	192	73	104	751	122
6	158	123	311	1990	497	1350	4770	179	64	101	579	104
7	139	126	365	1680	445	1560	4280	157	56	80	450	89
8	126	135	388	1440	402	1740	3690	138	51	80	367	79
9	158	146	362	1230	367	1970	3070	133	46	63	296	72
10	163	145	337	1050	340	2020	2470	110	40	60	217	69
11	161	136	315	908	318	1850	2000	95	36	8[illegible]	160	66
12	166	123	513	794	299	1620	1670	84	33	14[illegible]	124	61
13	203	112	820	738	319	1430	1410	78	30	213	100	57
14	267	101	1100	698	399	1240	1190	73	29	155	92	53
15	306	93	1480	660	376	1060	1050	69	31	91	111	50
16	329	86	1580	624	362	901	1030	64	30	68	101	47
17	340	81	1570	592	342	768	953	62	27	57	146	44
18	343	77	1500	568	318	682	845	59	25	54	170	44
19	326	72	1350	554	296	601	769	54	23	68	200	50
20	298	145	1100	541	275	534	700	51	20	114	230	58
21	267	597	973	525	273	512	625	47	28	247	250	59
22	238	817	834	507	427	468	558	46	60	444	247	58
23	245	1010	746	486	897	425	506	55	87	595	216	59
24	247	1100	682	482	1220	390	475	69	87	695	348	58
25	238	1080	615	581	1420	357	437	75	73	699	355	55
26	224	1050	553	842	1430	326	405	96	67	606	517	52
27	207	1010	500	1110	1580	470	377	114	60	470	555	49
28	184	943	461	1210	2520	1380	344	113	60	388	434	82
29	162	809	985	1290	3170	2870	311	135	59	328	326	191
30	142	691	2790	1250	---	3930	291	155	74	418	291	272
31	124	---	4260	1140	---	3860	---	165	---	586	280	---
TOTAL	7043	11290	28694	42090	22026	45814	50046	3575	1773	7401	12205	2805
MEAN	227	376	926	1358	760	1478	1668	115	59.1	239	394	93.5
MAX	357	1100	4260	4650	3170	3930	4770	256	166	699	1250	272
MIN	124	72	311	482	273	326	281	46	20	54	92	44
CFSM	.40	.65	1.61	2.36	1.32	2.57	2.90	.20	.10	.42	.69	.16
IN.	.46	.73	1.86	2.72	1.42	2.96	3.24	.23	.11	.48	.79	.18
AC-FT	13970	22390	56910	83490	43690	90870	99270	7090	3520	14680	24210	5560

CAL YR 1983 TOTAL 240148 MEAN 658 MAX 4260 MIN 43 CFSM 1.14 IN 15.54 AC-FT 476300
WTR YR 1984 TOTAL 234762 MEAN 641 MAX 4770 MIN 20 CFSM 1.12 IN 15.19 AC-FT 465700

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02321500 SANTA FE RIVER AT WORTHINGTON SPRINGS, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1957 to September 1960, October 1963 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
DEC												
28...	0745	480	83	6.6	7.0	2.1	10.7	88	270	210	25	13
MAR												
29...	0900	2630	50	6.3	17.5	4.0	5.8	62	>400	>670	16	9
JUL												
10...	0710	54	104	7.1	25.5	2.6	6.0	74	61	87	38	11
AUG												
23...	1235	207	85	6.1	23.0	.70	6.6	77	K10	>500	34	16

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
DEC												
28...	6.4	2.2	6.3	34	.6	.80	12	5.8	6.5	12	<.10	5.7
MAR												
29...	3.9	1.4	3.3	29	.4	1.5	7.0	6.8	1.5	7.2	<.10	2.5
JUL												
10...	9.6	3.5	6.0	25	.4	1.2	27	4.2	7.0	11	.20	4.8
AUG												
23...	8.8	3.0	5.1	24	.4	1.2	18	28	7.2	12	.10	6.3

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC												
28...	101	48	.14	131	.19	.090	.12	.80	.110	.34	.090	.080
MAR												
29...	59	27	.08	419	<.10	<.010	--	.80	.240	.74	.190	.170
JUL												
10...	109	61	.15	16	.32	.100	.13	.50	.430	--	.400	.370
AUG												
23...	52	56	.07	29	.31	.060	.08	1.2	.320	--	.290	.280

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
DEC												
28...	.25	320	1	15	<.5	<1	<1	<3	1	400	2	<4
MAR												
29...	.52	250	1	10	<.5	<1	<1	<3	1	280	<1	6
JUL												
10...	1.1	180	2	14	<.0	<1	<1	<3	<1	320	2	<4
AUG												
23...	.86	370	2	14	<.0	<1	<1	<3	2	520	2	<4

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC												
28...	7	<.1	<10	<1	<1	<1	20	<6	4	4	5.2	75
MAR												
29...	12	<.1	<10	<1	<1	<1	13	<6	7	14	99	21
JUL												
10...	20	<.1	<10	3	<1	<1	40	<6	12	9	1.3	56
AUG												
23...	24	<.1	<10	2	<1	<1	25	<6	9	11	6.1	36

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02322500 SANTA FE RIVER NEAR FORT WHITE, FL

LOCATION.--Lat 29°50'55", long 82°42'55", in SE¼ sec.28, T.7 S., R.16 E., Gilchrist County, Hydrologic Unit 03110206, on left bank 2.1 mi upstream from bridge on State Highway 47, 5.1 mi south of Fort White, and 18 mi upstream from mouth.

DRAINAGE AREA.--1,017 mi².

PERIOD OF RECORD.--October 1927 to January 1930, June 1932 to current year.

REVISED RECORDS.--WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 20.86 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to June 3, 1932, nonrecording gage at several sites within 200 ft of present site at various datums. Oct. 1, 1947 to Feb. 10, 1949, auxiliary nonrecording gage and since Feb. 11, 1949, auxiliary water-stage recorder at bridge on U.S. Highway 129, 16 mi downstream from base gage at datum 3.5 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--54 years (water years 1928-29, 1933-84), 1,619 ft³/s, 21.62 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft³/s Sept. 16, 1964, gage height, 15.34 ft; minimum 609 ft³/s May 22, 1957; minimum gage height, 0.45 ft Mar. 20, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,050 ft³/s Apr. 9; maximum gage height, 9.43 ft Apr. 11; minimum discharge, 1,340 ft³/s Nov. 18-19, gage height, 1.22 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1940	1460	1800	2890	2440	2970	3690	2630	1830	1540	2240	1780
2	1880	1460	1790	3440	2410	3270	3950	2540	1830	1550	2290	1760
3	1810	1450	1760	3970	2360	3470	4050	2480	1820	1560	2370	1750
4	1780	1430	1730	4330	2320	3540	4120	2440	1790	1580	2430	1720
5	1740	1430	1700	4410	2240	3510	4140	2390	1760	1590	2440	1680
6	1700	1410	1680	4280	2170	3430	4320	2350	1720	1610	2420	1660
7	1670	1420	1650	4050	2100	3330	4660	2340	1710	1620	2370	1630
8	1650	1420	1650	3760	2050	3200	4940	2300	1680	1610	2310	1620
9	1640	1410	1650	3520	2010	3170	5030	2260	1670	1610	2220	1610
10	1620	1410	1640	3330	1980	3210	4960	2210	1660	1590	2160	1590
11	1610	1400	1680	3170	1950	3240	4800	2180	1640	1580	2090	1570
12	1590	1390	1680	2990	1930	3220	4570	2150	1620	1580	2020	1550
13	1580	1390	1720	2870	1930	3160	4310	2120	1610	1580	1960	1540
14	1570	1380	1800	2770	1930	3040	4080	2100	1600	1580	1900	1520
15	1580	1380	1870	2680	1930	2900	3930	2070	1580	1580	1860	1520
16	1580	1360	1980	2610	1940	2770	3800	2040	1580	1570	1840	1510
17	1590	1350	2060	2540	1950	2640	3680	2010	1570	1560	1800	1490
18	1590	1350	2120	2490	1960	2520	3590	1990	1560	1550	1800	1480
19	1590	1350	2160	2440	1960	2440	3510	1980	1550	1580	1790	1480
20	1590	1400	2160	2370	1950	2390	3450	1950	1540	1570	1770	1470
21	1580	1390	2140	2330	1950	2410	3400	1910	1530	1580	1760	1460
22	1580	1460	2120	2290	1960	2410	3330	1890	1540	1620	1760	1460
23	1570	1560	2110	2260	1980	2420	3280	1900	1520	1680	1770	1450
24	1550	1650	2080	2250	2040	2420	3230	1870	1520	1760	1760	1450
25	1540	1690	2040	2240	2130	2420	3130	1840	1560	1890	1760	1440
26	1530	1730	2000	2240	2220	2420	3050	1830	1550	2030	1800	1430
27	1520	1780	1960	2270	2360	2440	2990	1810	1530	2100	1840	1420
28	1500	1810	1960	2310	2490	2510	2900	1810	1520	2130	1870	1470
29	1500	1810	2040	2360	2670	2620	2800	1830	1520	2110	1870	1450
30	1490	1810	2080	2400	---	2910	2710	1840	1550	2130	1840	1460
31	1480	---	2390	2430	---	3310	---	1830	---	2190	1810	---
TOTAL	50140	44730	59200	90290	61310	89710	114400	64890	48660	52810	61920	46420
MEAN	1617	1491	1910	2913	2114	2894	3813	2093	1622	1704	1997	1547
MAX	1940	1810	2390	4410	2670	3540	5030	2630	1830	2190	2440	1780
MIN	1480	1350	1640	2240	1930	2390	2710	1810	1520	1540	1760	1420
CFSM	1.59	1.47	1.88	2.86	2.08	2.85	3.75	2.06	1.60	1.68	1.96	1.52
IN.	1.83	1.64	2.17	3.30	2.24	3.28	4.18	2.37	1.78	1.93	2.26	1.70
AC-FT	99450	88720	117400	179100	121600	177900	226900	128700	96520	104700	122800	92070

CAL YR 1983 TOTAL 690520 MEAN 1892 MAX 3900 MIN 1050 CFSM 1.86 IN 25.26 AC-FT 1370000
WTR YR 1984 TOTAL 784480 MEAN 2143 MAX 5030 MIN 1350 CFSM 2.11 IN 28.69 AC-FT 1556000

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02323500 SUWANNEE RIVER NEAR WILCOX, FL

LOCATION.--Lat 29°35'22", long 82°56'12", in NW¼ sec.29, T.10 S., R.14 E., Levy County, Hydrologic Unit 03110205, on left bank about 400 ft downstream from Fort Fannin Bridge on U.S. Highway 19, 2.0 mi southwest of Wilcox and 33 mi upstream from mouth.

DRAINAGE AREA.--9,640 mi², approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to September 1931, October 1941 to current year. Monthly discharge only for some periods, published in WSP 1304.

REVISED RECORDS.--WSP 1905: WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 0.53 ft below National Geodetic Vertical Datum of 1929. Prior to July 4, 1931, nonrecording gage at site 400 ft upstream at present datum. July 4 to Sept. 30, 1931, and Mar. 26 to May 14, 1942, water-stage recorder, and May 15, 1942 to Jan. 24, 1951, nonrecording gage at present site and datum. Since Feb. 1, 1951, auxiliary water-stage recorder about 9.0 mi downstream from base gage. Datum of gage is 2.99 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow generally affected by tide when discharge is less than 17,500 ft³/s.

AVERAGE DISCHARGE.--44 years (water years 1931, 1942-83), 10,640 ft³/s, 14.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 84,700 ft³/s Apr. 14, 1948, gage height, 22.32 ft; minimum daily since January 1951, 2,960 ft³/s Oct. 25, 1981; minimum gage height since January 1951, 0.57 ft Jan. 19, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48,400 ft³/s Apr. 16, gage height, 17.06 ft; minimum daily, 5,550 ft³/s Nov. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8280	6430	7950	16500	18300	21200	33600	32500	16100	10600	13900	12100
2	7850	6410	7630	16500	18300	21300	33800	31600	15400	10800	14000	12100
3	7520	6000	7380	16700	18200	21900	34600	30900	15300	10900	14700	11700
4	7210	5910	7470	17000	19100	22200	36200	30400	15300	10800	15100	11300
5	7270	6050	7640	17300	19900	22300	37400	30000	15200	11100	15500	11300
6	7150	6270	7340	17800	20800	22500	38600	29600	14700	11400	15900	11300
7	7240	5840	8630	18200	21700	22800	39800	29100	14600	11900	16300	11500
8	7060	5960	8120	18500	22200	22900	41100	28500	14400	11900	16200	11100
9	7160	6140	8120	18600	22400	23100	42300	27600	14100	12000	16300	10400
10	7420	5840	8170	18800	22600	23400	43500	26500	13800	12000	16300	9820
11	6860	6540	8070	19000	23000	24000	44800	25400	13600	12000	16200	9530
12	6860	6680	8130	18700	23300	24800	45900	24400	13500	11900	15800	9370
13	6910	6170	9030	18400	23600	25900	46800	23500	13500	11700	15600	9210
14	7680	6100	8160	18200	23900	27100	47500	22700	13000	11600	15300	9140
15	7440	5750	9650	17900	24000	28300	48000	22300	12600	11700	15100	8970
16	7210	6500	10600	17800	23900	29700	48300	21900	12400	11300	15100	8960
17	7030	6480	11100	17700	23900	31200	48200	20800	12500	11000	14800	9690
18	7170	5990	11200	17600	23700	32800	47900	20000	12400	10600	14200	9160
19	6980	5640	11300	17500	23400	34200	47400	19500	12300	11500	13600	8960
20	6700	5550	11800	17700	23200	35600	46600	19100	12300	12100	13300	8690
21	6780	6240	12100	17700	22900	36700	45700	18800	12200	12100	13600	8350
22	6900	6170	11800	18000	22700	37300	44500	18300	12100	12300	13600	8030
23	6350	5920	12300	17200	22500	37400	43300	18000	12000	12500	13000	7870
24	6500	5870	13200	16100	22400	37300	42000	17600	11700	12900	12100	7760
25	6740	7050	15200	15900	22200	37000	40500	17400	11300	12800	11900	7800
26	6810	6700	15100	16200	21900	36300	39000	17100	11300	13100	12000	7910
27	7070	6590	14400	15800	21900	36000	37600	16600	11000	13200	11800	8340
28	6810	6850	13600	16400	22200	35700	36200	16200	10700	13500	11800	8520
29	6670	7950	13800	16600	21700	35000	34800	15700	10300	13500	11800	8270
30	6530	8000	15600	16900	---	34300	33600	16000	10200	13700	11900	8010
31	6450	---	16300	17500	---	33800	---	16500	---	13800	12000	---
TOTAL	218610	189590	330890	540700	639800	914000	1249500	704500	389800	372200	438700	285160
MEAN	7052	6320	10670	17440	22060	29480	41650	22730	12990	12010	14150	9505
MAX	8280	8000	16300	19000	24000	37400	48300	32500	16100	13800	16300	12100
MIN	6350	5550	7340	15800	18200	21200	33600	15700	10200	10600	11800	7760
CFSM	.73	.66	1.11	1.81	2.29	3.06	4.32	2.36	1.35	1.25	1.47	.99
IN.	.84	.73	1.28	2.09	2.47	3.53	4.82	2.72	1.50	1.44	1.69	1.10
AC-FT	433600	376100	656300	1072000	1269000	1813000	2478000	1397000	773200	738300	870200	565600

CAL YR 1983 TOTAL 5179480 MEAN 14190 MAX 31100 MIN 5550 CFSM 1.47 IN 19.99 AC-FT 10270000
WTR YR 1984 TOTAL 6273450 MEAN 17140 MAX 48300 MIN 5550 CFSM 1.78 IN 24.21 AC-FT 12440000

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02323500 SUWANNEE RIVER NEAR WILCOX, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.35	3.40	3.71	6.52	7.74	9.28	13.75	13.44	6.90	5.64	7.00	5.77
2	4.41	3.36	3.96	6.84	7.96	9.32	13.80	13.17	6.90	5.48	7.02	5.67
3	4.46	3.54	4.29	7.18	8.27	9.45	14.01	12.95	6.90	5.40	7.02	5.59
4	4.55	3.77	4.50	7.51	8.64	9.61	14.43	12.81	6.83	5.39	7.02	5.54
5	4.48	3.88	4.22	7.83	8.95	9.77	14.74	12.68	6.75	5.41	7.09	5.46
6	4.51	3.61	4.40	8.09	9.20	9.97	15.01	12.54	6.72	5.48	7.16	5.31
7	4.31	3.64	3.79	8.29	9.41	10.14	15.29	12.38	6.68	5.53	7.22	5.06
8	4.20	3.89	3.72	8.39	9.61	10.17	15.57	12.16	6.63	5.60	7.30	4.92
9	4.11	3.61	3.73	8.43	9.81	10.22	15.84	11.87	6.63	5.65	7.36	4.86
10	3.88	3.70	3.84	8.51	10.02	10.37	16.11	11.51	6.61	5.73	7.39	4.98
11	3.92	3.41	4.15	8.60	10.19	10.62	16.36	11.12	6.59	5.80	7.39	4.99
12	4.11	3.03	4.30	8.49	10.32	10.93	16.58	10.75	6.53	5.87	7.38	4.98
13	4.19	3.07	3.98	8.37	10.46	11.31	16.76	10.39	6.43	5.92	7.34	4.95
14	3.70	3.22	4.45	8.27	10.57	11.69	16.91	10.05	6.38	5.89	7.25	4.86
15	3.54	3.62	4.52	8.18	10.60	12.10	17.01	9.74	6.35	5.85	7.11	4.81
16	3.60	3.26	4.41	8.11	10.58	12.56	17.05	9.46	6.25	5.81	6.97	4.70
17	3.71	2.94	4.51	8.10	10.54	13.04	17.03	9.20	6.11	5.75	6.76	4.39
18	3.67	3.21	4.63	8.06	10.47	13.50	16.98	8.97	5.94	5.84	6.59	4.20
19	3.66	3.53	4.93	8.03	10.38	13.91	16.87	8.80	5.80	5.85	6.48	4.18
20	3.80	4.18	5.06	7.81	10.27	14.26	16.73	8.65	5.63	5.75	6.44	4.21
21	3.70	3.94	5.18	7.57	10.15	14.54	16.53	8.50	5.48	5.66	6.25	4.31
22	3.53	3.64	5.49	7.37	10.08	14.69	16.30	8.33	5.51	5.74	6.00	4.36
23	4.06	3.74	5.71	7.26	9.99	14.74	16.05	8.20	5.43	5.92	5.87	4.36
24	4.12	4.17	5.85	7.33	9.81	14.70	15.77	8.04	5.34	6.04	5.91	4.36
25	3.72	3.72	5.67	7.38	9.63	14.61	15.45	7.87	5.32	6.20	5.91	4.28
26	3.48	3.37	5.75	7.35	9.46	14.46	15.11	7.71	5.32	6.38	5.87	4.19
27	3.28	3.76	5.98	7.33	9.45	14.38	14.77	7.55	5.31	6.55	5.84	3.93
28	3.30	4.29	6.31	7.30	9.54	14.31	14.43	7.44	5.32	6.71	5.86	3.87
29	3.41	3.86	6.70	7.33	9.41	14.13	14.08	7.36	5.50	6.81	5.88	4.22
30	3.46	3.66	6.53	7.43	---	13.95	13.75	7.24	5.69	6.90	5.89	4.20
31	3.46	---	6.38	7.59	---	13.80	---	7.03	---	7.00	5.86	---
TOTAL	120.68	108.02	150.65	240.85	281.51	380.53	469.07	307.91	183.78	183.55	206.43	141.51
MEAN	3.89	3.60	4.86	7.77	9.71	12.28	15.64	9.93	6.13	5.92	6.66	4.72
MAX	4.55	4.29	6.70	8.60	10.60	14.74	17.05	13.44	6.90	7.00	7.39	5.77
MIN	3.28	2.94	3.71	6.52	7.74	9.28	13.75	7.03	5.31	5.39	5.84	3.87

CAL YR 1983 TOTAL 2386.71 MEAN 6.54 MAX 13.04 MIN 2.94
WTR YR 1984 TOTAL 2774.49 MEAN 7.58 MAX 17.05 MIN 2.94

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02323500 SUWANNEE RIVER NEAR WILCOX, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)
OCT												
04...	0940	8370	275	7.6	23.0	6.5	.6	.85	.010	.86	.020	.34
DEC												
14...	0950	6840	230	7.1	17.0	--	1.1	.53	.010	.54	.010	.25
FEB												
01...	0915	18100	95	5.2	12.0	8.9	2.1	.18	.010	.19	.020	.49
APR												
30...	1315	33600	170	5.2	23.5	5.2	1.6	.29	.020	.31	.040	.59
JUL												
24...	0900	13000	247	6.4	24.5	5.6	1.4	.68	.020	.70	.060	.40
SEP												
19...	1250	8510	334	7.8	23.0	7.4	--	.98	.010	.99	.020	.34

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
OCT												
04...	.36	1.2	5.4	.210	.190	170	60	110	3	1	1	360
DEC												
14...	.26	.80	3.5	.220	.190	--	--	--	--	--	--	--
FEB												
01...	.51	.70	3.1	.180	.140	--	--	--	--	--	--	--
APR												
30...	.63	.94	4.2	.180	.170	--	--	--	--	--	--	--
JUL												
24...	.46	1.2	5.1	.320	.290	--	--	--	--	--	--	--
SEP												
19...	.36	1.4	6.0	.160	.130	110	70	40	1	1	4	290

DATE	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT												
04...	150	210	4	2	2	10	4	6	<.1	<1	<3	10
DEC												
14...	--	--	--	--	--	--	--	--	--	--	--	10
FEB												
01...	--	--	--	--	--	--	--	--	--	--	--	21
APR												
30...	--	--	--	--	--	--	--	--	--	--	--	19
JUL												
24...	--	--	--	--	--	--	--	--	--	--	--	12
SEP												
19...	170	120	2	1	1	10	5	5	<.1	1	11	--

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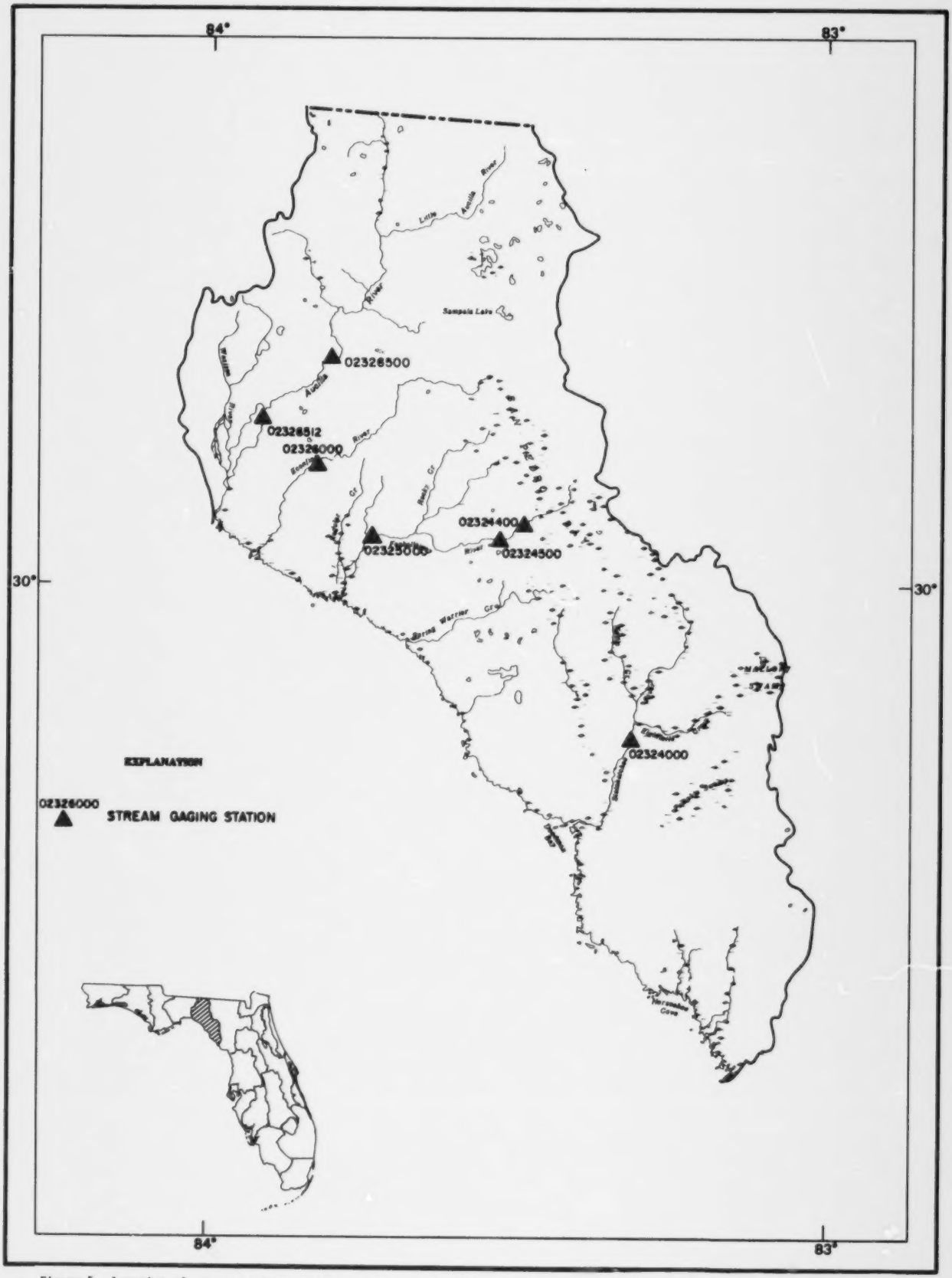

Figure 5. Location of stream gaging stations in the Steinhatchee, Fenholloway, Econfina, and Aucilla River basins.

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02324000 STEINHATCHEE RIVER NEAR CROSS CITY, FL
(National stream-quality accounting network station)

LOCATION.--Lat 29°47'11", long 83°19'18", in NE¼ sec.16, T.8 S., R.10 E., Taylor County, Hydrologic Unit 03110102, on right bank 0.7 mi downstream from Atlantic Coast Line Railroad bridge, 0.7 mi south of Clara, 13 mi upstream from mouth, and 16 mi northwest of Cross City.

DRAINAGE AREA.--350 mi², approximately. See REMARKS.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1950 to current year.

REVISED RECORDS.--WSP 1234: 1950. WSP 1724: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7.84 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage-height record, Dec. 17 to Dec. 27, and May 10 to June 7, which are poor. Below about 500 ft³/s, all flow enters sinkhole 0.5 mi downstream from gage. Above about 4,000 ft³/s, discharge measurements are made along U.S. Highways 19, 98, and Alternate 27, measurements include all flow from about 3 mi northwest to 5 mi southwest of main channel, drainage area is increased by about 30 mi².

AVERAGE DISCHARGE.--34 years, 331 ft³/s, 12.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft³/s Sept. 13, 14, 1964, gage height, 18.90 ft; minimum, 2.5 ft³/s July 18, 1981; minimun gage height, 2.38 ft July 29-31, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,440 ft³/s, Apr. 7, gage height, 14.09 ft; minimum daily discharge, 14 ft³/s, Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	137	33	140	1840	410	1200	1240	230	120	300	1580	154
2	122	30	131	1740	387	1210	1110	208	110	308	1510	135
3	108	28	122	1610	365	1160	1060	188	100	295	1380	119
4	97	28	123	1460	353	1070	1690	168	88	422	1240	106
5	85	28	133	1310	333	957	2080	151	80	415	1130	96
6	75	33	136	1210	308	904	2330	132	76	331	1010	93
7	68	32	146	1090	285	1050	2420	112	70	308	893	88
8	63	34	137	994	268	1040	2350	94	69	272	787	76
9	61	35	132	905	255	1040	2150	103	61	247	680	64
10	57	35	127	832	244	1040	1940	93	53	287	584	59
11	55	33	145	765	234	1010	1680	86	48	277	504	52
12	55	31	403	703	224	960	1450	80	43	407	436	47
13	54	30	420	647	235	902	1270	76	38	360	380	42
14	55	30	403	599	258	837	1150	70	36	307	327	37
15	55	28	416	559	240	772	1050	64	33	332	287	33
16	55	28	416	526	225	696	969	60	30	276	268	30
17	51	27	401	497	214	623	873	58	29	235	247	28
18	49	27	381	478	203	566	785	54	48	268	215	26
19	46	26	345	605	192	518	709	53	44	620	197	25
20	44	205	330	584	184	476	635	54	65	1170	220	24
21	42	202	330	558	194	475	569	58	62	1250	234	22
22	41	176	325	523	269	436	514	68	93	1290	217	21
23	42	134	300	498	309	403	492	86	208	1430	222	19
24	47	170	260	504	300	373	484	90	208	1500	239	18
25	44	182	260	505	286	350	434	91	141	1490	242	16
26	41	182	260	498	267	328	391	92	102	1380	251	15
27	38	180	290	498	522	629	352	115	81	1360	250	14
28	35	172	323	485	1010	1520	314	140	68	1390	233	17
29	33	158	1070	472	1120	1620	283	145	77	1350	215	36
30	31	149	1650	457	---	1560	255	140	186	1350	197	40
31	30	---	1830	436	---	1400	---	130	---	1560	175	---
TOTAL	1816	2486	11885	24388	9694	27125	33029	3289	2467	22787	16350	1552
MEAN	58.6	82.9	383	787	334	875	1101	106	82.2	735	527	51.7
MAX	137	205	1830	1840	1120	1620	2420	230	208	1560	1580	154
MIN	30	26	122	436	184	328	255	53	29	235	175	14
CFSM	.17	.24	1.09	2.25	.95	2.50	3.15	.30	.24	2.10	1.51	.15
IN.	.19	.26	1.26	2.59	1.03	2.88	3.51	.35	.26	2.42	1.74	.16
AC-FT	3600	4930	23570	48370	19230	53800	65510	6520	4890	45200	32430	3080

CAL YR 1983 TOTAL 158092.8 MEAN 433 MAX 1910 MIN 3.2 CFSM 1.24 IN 16.80 AC-FT 313600
WTR YR 1984 TOTAL 156868.0 MEAN 429 MAX 2420 MIN 14 CFSM 1.23 IN 16.67 AC-FT 311100

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02324000 STEINHATCHEE RIVER NEAR CROSS CITY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
MAR												
28...	1345	1530	80	7.1	19.0	1.5	5.5	61	>400	>670	41	7
JUL												
10...	1550	300	153	7.4	25.0	1.3	6.6	80	80	110	84	18
AUG												
23...	1805	232	129	--	23.5	.60	6.6	78	220	220	73	11

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
MAR												
28...	14	1.4	2.1	10	.1	.30	34	5.2	--	4.8	<.10	1.4
JUL												
10...	29	2.7	2.5	--	.1	<.10	66	5.1	10	6.9	<.10	4.2
AUG												
23...	25	2.5	2.6	--	.1	<.10	62	--	8.4	7.2	<.10	4.5

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
MAR												
28...	75	.10	310	.13	.070	.09	.80	.020	.06	<.010	<.010	--
JUL												
10...	154	.21	125	.16	.050	.06	1.2	.060	--	.050	.030	.09
AUG												
23...	156	.21	98	.24	.030	.04	1.2	.080	--	.070	.060	.18

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAR												
28...	110	1	7	<.5	<1	<1	<3	<1	280	<1	7	6
JUL												
10...	150	1	11	<.0	<1	<1	<3	2	690	<1	<4	16
AUG												
23...	280	1	10	<.0	<1	1	<3	1	840	<1	7	23

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR											
28...	<.1	<10	1	<1	<1	19	<6	3	6	25	17
JUL											
10...	<.1	<10	2	<1	3	37	<6	6	15	12	27
AUG											
23...	<.1	<10	1	<1	<1	38	<6	4	--	--	--

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02324400 PENHOLLOWAY RIVER NEAR FOLEY, FL

LOCATION.--Lat 30°05'53", long 83°28'19", in NE¼ sec.36, T.4 S., R.8 E., Taylor County, Hydrologic Unit 03110102, near left bank at downstream side of bridge on U.S. Highway 27, 1.8 mi upstream from small tributary, 4 mi northeast of Foley, and 32 mi upstream from mouth.

DRAINAGE AREA.--60 mi² approximately.

PERIOD OF RECORD.--February to August 1955 (discharge measurements only); September 1955 to current year.

REVISED RECORDS.--WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 53.59 ft National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Records fair.

AVERAGE DISCHARGE.--29 years, 57.0 ft³/s, 41,300 acre ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,210 ft³/s Sept. 12, 1964, gage height, 15.21 ft; minimum, 0.54 ft³/s Nov. 1, 1968; minimum gage height, 0.50 ft June 29.30, July 1, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above a base of 300 ft³/s and maximum(*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage ght (ft)
Apr. 5	0300	395	10.84	July 19	2200	*644	*11.71
Apr. 9	1900	544	11.23				

Minimum discharge, 2.9 ft³/s part of each day Nov. 19, 20, gage height, 1.33 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	4.0	23	224	130	59	130	71	182	46	197	22
2	22	3.7	20	204	118	54	119	62	137	44	185	21
3	18	3.5	18	187	107	48	147	53	107	37	169	18
4	16	3.3	17	174	104	43	358	45	83	31	152	17
5	14	3.4	16	165	100	41	389	39	62	26	136	15
6	12	3.4	16	155	93	135	365	33	48	23	122	14
7	11	3.2	17	146	86	157	338	28	38	22	109	13
8	9.7	4.1	16	137	79	164	314	24	30	21	95	12
9	11	4.9	14	127	72	177	447	21	24	25	81	12
10	11	4.5	13	118	65	164	509	18	18	32	68	11
11	10	4.3	16	110	60	147	462	15	15	28	57	10
12	9.5	3.9	55	101	55	132	418	13	14	35	49	9.7
13	11	3.7	59	93	53	120	377	12	12	28	45	9.0
14	14	3.5	59	84	50	109	346	10	10	23	40	8.4
15	15	3.3	62	77	46	97	319	9.0	10	21	34	7.9
16	14	3.4	62	70	42	86	292	8.0	8.6	37	30	7.3
17	12	3.1	59	65	39	75	265	7.1	7.6	28	26	6.8
18	11	3.0	55	61	35	65	242	6.3	6.8	95	22	6.3
19	10	2.9	51	68	32	56	221	5.6	7.3	424	20	5.9
20	9.0	8.2	48	65	30	48	202	5.3	7.9	615	19	5.4
21	8.3	17	44	61	29	46	185	4.9	6.9	558	26	4.9
22	7.7	15	40	56	30	41	169	4.8	7.9	496	36	4.5
23	7.6	14	38	52	30	36	158	7.6	10	463	36	4.1
24	7.1	15	35	52	28	32	149	7.5	8.6	439	32	3.7
25	6.6	32	31	54	26	30	137	13	7.9	397	28	3.3
26	6.0	32	28	72	24	30	125	19	6.9	371	42	3.2
27	5.6	30	26	137	60	71	114	21	6.1	307	39	3.1
28	5.2	28	41	152	62	123	102	41	5.7	253	35	3.1
29	4.9	28	137	166	62	137	92	104	11	228	30	4.2
30	4.5	26	188	157	---	147	82	178	33	209	27	4.0
31	4.2	---	230	143	---	141	---	216	---	193	24	---
TOTAL	332.9	314.3	1534	3533	1747	2811	7573	1102.1	932.2	5555	2011	269.8
MEAN	10.7	10.5	49.5	114	60.2	90.7	252	35.6	31.1	179	64.9	8.99
MAX	25	32	230	224	130	177	509	216	182	615	197	22
MIN	4.2	2.9	13	52	24	30	82	4.8	5.7	21	19	3.1
CFSM	.18	.18	.83	1.90	1.00	1.51	4.20	.59	.52	2.98	1.08	.15
IN.	.21	.19	.95	2.19	1.08	1.74	4.70	.68	.58	3.44	1.25	.17
AC-FT	660	623	3040	7010	3470	5580	15020	2190	1850	11020	3990	535

CAL YR 1983 TOTAL 34226.9 MEAN 93.8 MAX 484 MIN 2.9 CFSM 1.56 IN 21.22 AC-FT 67890
WTR YR 1984 TOTAL 27715.3 MEAN 75.7 MAX 615 MIN 2.9 CFSM 1.26 IN 17.18 AC-FT 54970

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02324500 FENHOLLOWAY RIVER AT FOLEY, FL

LOCATION.--Lat 30°03'55", long 83°34'49", in NE¼ sec.7, T.5 S., R.8 E., Taylor County, Hydrologic Unit 03110102, near center of span on downstream side of bridge of U.S. Highway 19, 1.6 mi west of Foley, 2.4 mi downstream from clarifier flume of the Buckeye Cellulose Corporation plant, 11.4 mi upstream from Spring Creek, and 24.4 mi upstream from mouth.

DRAINAGE AREA.--120 mi², approximately.

PERIOD OF RECORD.--September 1946 to current year.

REVISED RECORDS.--WSP 1905: Drainage area. WDR FL-77-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 24.85 ft National Geodetic Vertical Datum of 1929. Prior to June 24, 1947, nonrecording gage and June 24, 1947 to Feb. 4, 1971, water-stage recorder, at site about 1.6 mi upstream at datum 4.51 ft higher.

REMARKS.--Records poor. Since Feb. 1, 1954, large ground-water withdrawals by cellulose plant upstream. Records include return flow from plant.

AVERAGE DISCHARGE.--38 years; 133 ft³/s, 96,359 acre ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,810 ft³/s Sept. 12, 1964, gage height, 18.52 ft; no flow Jan. 2-4, 1971, caused by diversion of flow into lagoon; minimum gage height, 6.40 ft Jan. 8, 9, 1950, at former site and datum. Maximum discharge, 1,120 ft³/s Apr. 5, 1973, gage height 15.03; minimum discharge, 0.80 ft³/s Aug. 16, 1972; minimum gage height, 8.96 ft July 11, 12, 1974, present site and datum.

EXTREMES FOR CURRENT YEAR.--Peak discharge above a base of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 1	1400	407	13.30	July 21	1700	730	14.35
Apr. 10	2100	701	14.17				

Minimum discharge, 34 ft³/s Sept. 16, minimum gage height, 9.47 ft, Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	81	115	401	273	164	264	208	307	133	328	119
2	127	82	103	390	263	157	253	193	279	140	317	119
3	122	77	102	367	253	149	271	175	248	138	301	118
4	119	80	101	345	248	143	397	162	217	130	285	116
5	110	80	101	333	239	134	571	153	189	118	270	106
6	110	78	100	322	233	181	650	145	162	111	255	106
7	103	77	96	313	228	229	622	134	142	105	243	99
8	100	84	99	301	220	297	580	122	125	102	229	94
9	97	81	98	290	212	311	577	120	112	117	211	94
10	99	83	94	285	205	306	664	111	101	121	190	73
11	95	78	107	278	195	287	691	107	94	150	178	48
12	99	79	145	265	184	259	650	101	90	135	171	41
13	109	80	179	255	179	240	605	101	88	121	158	39
14	101	78	187	242	173	220	564	97	87	116	149	39
15	102	81	192	230	162	206	526	94	84	110	137	38
16	104	79	187	218	155	191	488	91	82	125	131	36
17	99	76	186	211	147	177	456	85	82	121	123	37
18	100	78	179	208	137	162	426	85	82	188	117	41
19	97	77	168	212	131	158	398	85	81	377	123	59
20	95	99	170	210	121	139	369	84	80	577	134	54
21	93	86	157	205	116	129	345	83	78	712	139	83
22	93	79	148	199	115	120	325	93	87	708	146	85
23	93	79	147	188	113	113	315	96	79	655	144	82
24	92	93	135	186	109	114	301	88	80	617	136	82
25	88	98	124	186	106	113	293	88	79	583	137	60
26	86	115	98	205	104	109	281	94	77	526	147	84
27	85	120	89	255	130	159	268	98	73	463	140	85
28	81	127	133	291	151	236	252	111	98	409	140	94
29	80	119	246	294	160	257	241	183	109	372	130	91
30	81	117	310	287	---	267	224	270	123	350	130	90
31	81	---	365	281	---	269	---	302	---	337	124	---
TOTAL	3075	2641	4661	8253	5062	5996	12867	3959	3615	8961	5565	2332
MEAN	99.2	88.0	150	266	175	193	429	128	121	289	180	77.7
MAX	134	127	365	401	273	311	691	302	307	712	328	119
MIN	80	76	89	186	104	109	224	83	73	102	117	36
CFSM	.83	.73	1.25	2.22	1.46	1.61	3.58	1.07	1.01	2.41	1.50	.65
IN.	.95	.82	1.44	2.56	1.57	1.86	3.99	1.23	1.12	2.78	1.73	.72
AC-FT	6100	5240	9250	16370	10040	11890	25520	7850	7170	17770	11040	4630

CAL YR 1983 TOTAL 71875 MEAN 197 MAX 620 MIN 76 CFSM 1.64 IN 22.28 AC-FT 142600
WTR YR 1984 TOTAL 66987 MEAN 183 MAX 712 MIN 36 CFSM 1.53 IN 20.77 AC-FT 132900

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02325000 FENHOLLOWAY RIVER NEAR PERRY, FL

LOCATION.--Lat 30°04'16", long 82°39'45", in SE¼ sec.6, T.5 S., R.7 E., Taylor County, Hydrologic Unit 03110102, near right bank on downstream side of bridge on State Highway 356, 1.0 mi southwest of the community of Hampton Springs, 5.5 mi southwest of Perry and 14 mi upstream from mouth.

DRAINAGE AREA.--160 mi², approximately.

PERIOD OF RECORD.--August 1946 to June 1952 (discharge measurements only); August 1952 to October 1954 (gage heights and discharge measurements only); November 1964 to July 1977 (crest-stage and periodic discharge measurements only); August 1977 to current year. Discontinued.

REVISED RECORDS.--WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. August 13, 1946 to October 1954, nonrecording gage at same site at datum 5.00 ft higher. November 1964 to July 1977, crest-stage gage at same site and datum.

REMARKS.--Records fair. Natural flow of stream affected by large ground-water withdrawals by cellulose plant about 10 mi upstream. Records include return flow from plant.

AVERAGE DISCHARGE.--7 years, 229 ft³/s, 19.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,760 ft³/s Sept. 13, 1964, gage height, 24.39 ft; minimum measured, 37 ft³/s Feb. 16, 1951; minimum gage height, 9.86 ft May 26, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 956 ft³/s July 25, gage height, 21.14 ft April 11; minimum daily discharge, 132 ft³/s Sept. 17 and 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	190	170	202	445	328	213	343	284	297	223	692	[illegible]
2	180	160	197	459	315	212	331	270	306	220	637	224
3	170	159	192	444	301	207	336	257	288	216	576	223
4	165	156	191	424	300	200	659	246	264	225	521	231
5	160	158	189	402	296	194	664	236	241	212	474	221
6	160	155	192	385	283	240	621	228	223	209	435	215
7	160	155	190	369	272	362	649	220	208	202	399	208
8	160	159	187	350	264	350	645	213	197	195	372	200
9	160	161	186	333	255	360	683	213	187	199	350	196
10	160	158	183	319	245	364	773	203	180	220	327	191
11	180	156	185	309	237	357	804	197	174	238	307	162
12	195	153	230	295	229	342	817	191	172	278	297	150
13	190	155	235	280	227	326	808	189	168	239	287	143
14	180	155	245	268	226	306	762	186	165	223	276	142
15	185	155	254	256	217	291	709	182	162	214	266	139
16	190	156	255	245	208	274	654	178	160	232	258	135
17	180	152	250	235	202	259	598	172	158	223	249	132
18	185	152	248	230	196	244	548	169	158	283	244	132
19	180	151	243	244	190	231	506	169	158	555	247	141
20	175	166	238	237	186	219	472	167	157	784	260	149
21	170	183	234	230	181	211	446	167	156	834	273	153
22	170	169	227	223	183	202	423	170	166	856	265	164
23	170	165	222	217	184	196	419	192	165	932	260	160
24	175	175	218	216	179	187	416	181	163	946	253	160
25	170	201	208	216	175	188	391	179	161	952	245	157
26	170	198	202	237	171	186	369	184	160	927	256	156
27	165	202	177	293	189	283	351	185	156	880	251	155
28	165	208	206	318	217	341	333	186	164	823	244	157
29	160	212	327	333	215	345	315	209	197	752	237	162
30	160	205	383	339	---	348	299	236	216	700	233	158
31	160	---	418	338	---	348	---	273	---	723	234	---
TOTAL	5340	5060	7114	9489	6671	8388	16144	6332	5727	14715	10225	5141
MEAN	172	169	229	306	230	271	538	204	191	475	330	171
MAX	195	212	418	459	328	364	817	284	306	952	692	231
MIN	160	151	177	216	171	186	299	167	156	195	233	132
CFSM	1.08	1.06	1.43	1.91	1.44	1.69	3.36	1.28	1.19	2.97	2.06	1.07
IN.	1.24	1.18	1.65	2.21	1.55	1.95	3.75	1.47	1.33	3.42	2.38	1.20
AC-FT	10590	10040	14110	18820	13230	16640	32020	12560	11360	29190	20280	10200

CAL YR 1983 TOTAL 116581 MEAN 319 MAX 948 MIN 135 CFSM 1.99 IN 27.10 AC-FT 231200
WTR YR 1984 TOTAL 100346 MEAN 274 MAX 952 MIN 132 CFSM 1.71 IN 23.33 AC-FT 199000

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02326000 ECONFINA RIVER NEAR PERRY, FL.

LOCATION.--Lat 30°10'14", long 83°49'26", in NE¼ sec.4, T.4 S., R.5 E., Taylor County, Hydrologic Unit 03110102, on right bank 10 ft downstream from wooden bridge, 3.0 mi downstream from Natural Well Branch, 14 mi upstream from mouth, and 14.7 mi northwest of Perry.

DRAINAGE AREA.--190 mi².

PERIOD OF RECORD.--February 1950 to current year.

REVISED RECORDS.--WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 14.35 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--34 years, 144 ft³/s, 9.88 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,540 ft³/s Sept. 17, 1957, gage height, 12.78 ft; minimum, 2.3 ft³/s July 8, 1955; minimum gage height, 1.87 ft Mar. 2,3, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,400 ft³/s Apr. 11, gage height, 11.74 ft; minimum daily, 26 ft³/s June 19-21, Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	35	285	607	472	338	550	271	69	59	717	95
2	72	34	279	616	453	335	546	244	76	66	690	86
3	66	33	270	616	427	326	593	220	74	72	660	80
4	60	32	259	613	454	311	927	199	69	79	622	75
5	56	32	250	595	499	295	1100	178	61	88	574	69
6	52	32	245	567	513	305	1070	162	55	85	526	61
7	49	32	242	536	506	387	1040	145	50	82	475	57
8	46	33	233	500	490	430	992	131	45	77	404	52
9	46	35	224	463	467	469	1200	128	41	75	344	47
10	56	36	217	442	439	499	1380	119	38	84	295	44
11	59	36	232	406	409	513	1400	110	35	84	256	41
12	59	36	295	376	384	509	1380	100	33	80	232	39
13	58	35	323	351	412	494	1320	90	31	72	213	37
14	59	34	357	328	431	473	1240	81	30	67	194	37
15	60	33	387	308	424	447	1150	73	28	60	168	37
16	59	33	403	290	406	416	1050	66	27	78	142	36
17	55	33	411	274	384	384	946	60	27	76	128	36
18	52	33	424	261	364	354	852	55	27	93	123	34
19	49	32	431	277	342	326	802	51	26	185	119	33
20	46	43	429	273	322	304	748	48	26	230	116	32
21	43	71	420	262	305	296	688	45	26	267	115	31
22	41	86	408	252	297	280	630	43	30	384	115	30
23	41	103	392	244	291	261	595	41	33	480	118	29
24	45	130	373	244	279	246	559	42	38	442	123	29
25	45	187	348	243	265	237	514	45	42	490	119	28
26	46	207	326	256	251	226	465	49	41	615	115	28
27	44	232	308	348	276	341	417	51	37	688	102	27
28	41	263	359	408	330	488	373	53	34	695	98	26
29	39	285	473	449	334	514	336	53	37	701	92	27
30	38	290	540	473	---	525	303	55	45	708	95	27
31	36	---	581	481	---	542	---	59	---	720	98	---
TOTAL	1599	2536	10724	12359	11226	11871	25166	3067	1231	7982	8188	1310
MEAN	51.6	84.5	346	399	387	383	839	98.9	41.0	257	264	43.7
MAX	81	290	581	616	513	542	1400	271	76	720	717	95
MIN	36	32	217	243	251	226	303	41	26	59	92	26
CFSM	.26	.43	1.75	2.02	1.96	1.93	4.24	.50	.21	1.30	1.33	.22
IN.	.30	.48	2.01	2.32	2.11	2.23	4.73	.58	.23	1.50	1.54	.25
AC-FT	3170	5030	21270	24510	22270	23550	49920	6080	2440	15830	16240	2600

CAL YR 1983 TOTAL 105259 MEAN 288 MAX 1010 MIN 32 CFSM 1.46 IN 19.78 AC-FT 208800
WTR YR 1984 TOTAL 97259 MEAN 266 MAX 1400 MIN 26 CFSM 1.34 IN 18.27 AC-FT 192900

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02326500 AUCILLA RIVER AT LAMONT, FL

LOCATION.--Lat 30°22'11", long 83°48'25", in NE¼ sec.27, T.1 S., R.5 E., Madison County, Hydrologic Unit 03110107, near left bank on downstream side of bridge on U.S. Highway 19, 0.6 mi southeast of Lamont, and 34 mi upstream from mouth.

DRAINAGE AREA.--747 mi².

PERIOD OF RECORD.--February 1950 to September 1979; November 1983 to September 1984 (gage heights and peak discharge only).

REVISED RECORDS.--WSP 1204, 1905: Drainage area. WSP 1504: 1953.

GAGE.--Water-stage recorder. Datum of gage is 42.90 ft National Geodetic Vertical Datum of 1929, unadjusted.

REMARKS.--Pumpage above and below station for irrigation during dry seasons. Since Aug. 27, 1963, low-head rock and concrete dam 0.6 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft³/s Apr. 8, 1973, gage height, 16.57 ft, river dry at gage June 13-16, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 7,650 ft³/s Apr. 9, gage height, 14.53 ft; minimum daily gage height 5.50, Sept. 28, 30.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	5.82	8.57	10.32	10.22	10.26	13.31	9.69	7.55	7.09	9.53	6.85
2	---	5.77	8.52	10.27	10.32	10.33	13.51	9.56	7.52	7.29	9.55	6.75
3	---	5.73	8.44	10.20	10.46	10.43	13.61	9.43	7.45	7.71	9.52	6.66
4	---	5.70	8.55	10.13	10.55	10.53	14.31	9.31	7.36	7.94	9.47	6.57
5	---	5.69	8.71	10.10	10.67	10.57	14.50	9.21	7.27	7.95	9.41	6.52
6	---	5.68	8.71	10.08	10.59	11.03	14.20	9.11	7.20	7.85	9.36	6.52
7	---	5.64	8.74	10.04	10.48	11.72	14.07	8.97	7.18	7.79	9.31	6.49
8	---	5.66	8.75	9.97	10.36	11.92	14.30	8.82	7.15	7.63	9.31	6.45
9	---	5.70	8.75	9.87	10.27	12.16	14.49	8.67	7.10	7.46	9.30	6.42
10	---	5.69	8.73	9.78	10.24	12.55	14.29	8.51	7.01	7.31	9.25	6.39
11	---	5.66	8.76	9.68	10.25	12.87	14.02	8.35	6.91	7.31	9.17	6.33
12	---	5.63	9.29	9.55	10.23	12.97	13.70	8.19	6.82	7.32	9.08	6.26
13	---	5.60	9.60	9.43	10.28	12.93	13.36	7.99	6.72	7.26	8.99	6.20
14	---	5.59	9.67	9.30	10.31	12.76	13.00	7.87	6.65	7.10	8.82	6.13
15	---	5.57	9.73	9.18	10.19	12.50	12.65	7.72	6.70	7.00	8.63	6.07
16	---	5.61	9.74	9.07	10.07	12.19	12.32	7.57	6.58	7.17	8.43	6.01
17	---	5.59	9.78	8.96	9.96	11.87	11.95	7.44	6.54	7.17	8.23	5.95
18	---	5.55	9.86	8.87	9.84	11.56	11.67	7.31	6.44	7.37	8.03	5.90
19	---	5.53	9.98	8.90	9.73	11.26	11.39	7.19	6.37	7.83	7.93	5.85
20	---	5.79	10.07	8.86	9.62	11.01	11.12	7.07	6.29	8.46	7.98	5.81
21	---	6.26	10.10	8.80	9.51	10.83	10.88	6.91	6.24	8.70	7.93	5.77
22	---	6.26	10.09	8.73	9.45	10.65	10.86	6.90	6.64	8.84	7.85	5.73
23	---	6.25	10.05	8.67	9.41	10.47	10.91	6.99	7.02	9.01	7.71	5.70
24	---	6.46	9.95	8.66	9.35	10.31	10.71	6.97	6.83	9.08	7.64	5.66
25	---	7.30	9.92	8.70	9.29	10.19	10.53	7.22	6.81	9.10	7.60	5.62
26	---	7.77	9.86	8.76	9.22	10.06	10.38	7.31	6.84	9.02	7.70	5.58
27	---	8.05	9.79	9.46	9.42	10.30	10.22	7.23	6.75	8.92	7.52	5.54
28	---	8.32	9.81	9.94	9.88	11.46	10.08	7.32	6.67	8.90	7.34	5.50
29	---	8.54	10.10	10.09	10.13	12.01	9.93	7.64	6.74	8.93	7.20	5.51
30	---	8.59	10.32	10.17	---	12.21	9.83	7.87	7.01	9.18	7.08	5.50
31	---	---	10.34	10.19	---	12.77	---	7.66	---	9.41	6.96	---
TOTAL	---	187.00	293.28	294.73	290.40	354.70	370.10	248.00	206.36	249.10	261.83	182.24
MEAN	---	6.23	9.46	9.51	10.01	11.44	12.34	8.00	6.88	8.04	8.45	6.07
MAX	---	8.59	10.34	10.32	10.67	12.97	14.50	9.69	7.55	9.41	9.55	6.85
MIN	---	5.53	8.44	8.66	9.22	10.08	9.83	6.90	6.24	7.00	6.96	5.50

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02326512 AUCILLA RIVER NEAR SCANLON, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°13'52", long 83°55'08", in SW¼ sec.10, T.3 S., R.4 E., Taylor County, Hydrologic Unit 03110103, on left bank, 3 mi west of Cabbage Grove, 6.9 mi north of Scanlon, 12 mi southwest of Lamont and 14 mi upstream from mouth.

DRAINAGE AREA.--805 mi².

WATER-DISCHARGE RECORD

PERIOD OF RECORD.--March 1950 to November 1957, crest-stage partial-record station; May 1965, May 1967 (one discharge measurement made each water year); August 1976 to current year.

GAGE.--Nonrecording gage. Datum of gage is 3.14 ft National Geodetic Vertical Datum of 1929, unadjusted. February 1950 to November 1957, crest-stage gage at same site at present datum. August 30, 1976 to April 24, 1982, water-stage recorder at same site and datum.

REMARKS.--Records poor. No gage height record for many periods during year.

AVERAGE DISCHARGE.--8 years, 596 ft³/s, 10.05 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,460 ft³/s Apr. 8, 1984, gage height, 20.47 ft present datum from floodmark, from rating extended above 6,000 ft³/s on basis of velocity-area study; minimum, 31 ft³/s Oct. 10, 1981, gage height, 2.85 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 9, 1973, reached a stage of about 23.5 ft, from floodmarks, (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,460 ft³/s estimated Apr. 8, gage height, 20.47 ft from floodmark, from rating extended above 6,000 ft³/s on basis of velocity-area study; minimum observed, 66 ft³/s Nov. 19, gage height, 3.02 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	184	115	710	1870	1740	1610	3210	2110	458	376	1340	245
2	185	105	714	1890	1750	1690	3400	1770	415	388	1360	236
3	173	97	714	1850	1730	1770	3860	1560	390	450	1350	220
4	160	95	700	1810	1980	1840	4490	1430	380	615	1310	206
5	153	100	657	1770	2190	1970	5090	1330	364	652	1260	195
6	160	95	760	1730	2280	2170	5950	1230	350	603	1210	190
7	169	95	823	1680	2270	2540	6690	1150	323	540	1150	185
8	156	93	815	1630	2180	2880	7170	1050	305	505	1090	175
9	138	95	812	1600	2160	3180	7220	985	300	470	1030	170
10	115	95	810	1550	1980	3400	6900	900	285	402	1030	170
11	121	88	804	1460	1820	3710	6680	805	273	380	1000	164
12	155	84	954	1360	1790	3960	6190	725	280	386	945	155
13	130	80	1090	1250	1800	4170	5750	662	321	390	900	150
14	220	82	1230	1150	1840	3960	5480	575	365	344	845	140
15	230	80	1380	1050	1890	3770	5210	455	270	335	788	134
16	206	80	1460	987	1850	3580	4960	405	222	335	700	125
17	195	78	1480	945	1750	3400	4680	444	200	338	549	125
18	190	70	1440	910	1630	3320	4380	420	190	378	505	115
19	190	68	1410	881	1530	3180	3960	391	185	602	516	109
20	179	115	1460	860	1450	3070	3620	350	173	1200	520	105
21	170	166	1530	831	1380	2900	3360	305	155	1390	520	107
22	164	130	1560	810	1310	2730	3250	297	155	1160	520	105
23	145	156	1590	785	1260	2570	3120	287	295	921	491	90
24	150	220	1570	768	1180	2400	2960	275	301	1060	450	80
25	142	318	1540	762	1120	2210	2950	275	257	1130	426	80
26	140	452	1490	935	1070	2050	2730	360	248	1130	430	82
27	140	540	1500	1210	1080	2060	2610	420	150	1070	436	74
28	142	606	1600	1380	1290	2280	2500	372	279	995	395	70
29	140	659	1680	1510	1510	2610	2420	315	265	970	355	74
30	139	698	1750	1620	---	2870	2300	458	311	1120	320	70
31	130	---	1820	1700	---	3070	---	495	---	1280	281	---
TOTAL	5011	5755	37853	40544	48810	86920	133090	22606	8465	21915	24022	4146
MEAN	162	192	1221	1308	1683	2804	4436	729	282	707	775	138
MAX	230	698	1820	1890	2280	4170	7220	2110	458	1390	1360	245
MIN	115	68	657	762	1070	1610	2300	275	150	335	281	70
CFSM	.20	.24	1.52	1.63	2.09	3.48	5.51	.91	.35	.88	.96	.17
IN.	.23	.27	1.75	1.87	2.26	4.02	6.15	1.04	.39	1.01	1.11	.19
AC-FT	9940	11420	75080	80420	96810	172400	264000	44840	16790	43470	47650	8220

CAL YR 1983 TOTAL 384777 MEAN 1054 MAX 4750 MIN 68 CFSM 1.31 IN 17.78 AC-FT 763200
WTR YR 1984 TOTAL 439137 MEAN 1200 MAX 7220 MIN 68 CFSM 1.49 IN 20.29 AC-FT 871000

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02326512 AUCILLA RIVER NEAR SCANLON, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
DEC 22...	1745	1490	38	6.4	11.0	1.3	9.9	90	110	67	15	6
MAR 29...	1730	2660	--	5.9	17.0	1.0	6.2	65	>400	170	9	4
JUL 06...	1320	590	73	7.5	24.0	1.7	6.0	72	32	78	37	8
AUG 24...	1410	442	80	6.6	25.0	1.8	6.6	80	36	74	40	7

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
DEC 22...	4.2	1.1	2.2	23	.3	.50	9.0	6.9	--	6.2	<.10	4.4
MAR 29...	2.6	.68	1.8	28	.3	.60	5.0	12	--	4.5	<.10	1.1
JUL 06...	11	2.3	1.8	10	.1	.30	29	1.8	--	4.7	<.10	4.7
AUG 24...	12	2.5	2.0	10	.1	.50	33	16	7.1	5.2	<.10	5.3

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC 22...	71	--	.10	286	.50	--	--	.60	.040	.12	.030	.120
MAR 29...	47	--	.06	338	<.10	<.010	--	1.0	.020	.06	.020	<.010
JUL 06...	90	--	.12	143	.17	.100	.13	.70	.060	--	.040	.020
AUG 24...	87	56	.12	104	.22	.050	.06	.80	.060	--	.050	.040

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
DEC 22...	.37	260	1	17	<.5	<1	<1	<3	1	540	1	<4
MAR 29...	--	230	1	11	<.5	<1	<1	<3	1	570	<1	5
JUL 06...	.06	510	1	15	<.0	<1	<1	<3	1	460	<1	<4
AUG 24...	.12	180	1	15	<.0	<1	<1	<3	1	730	<1	5

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 22...	38	<.1	<10	<1	<1	<1	8	<6	7	5	20	20
MAR 29...	25	<.1	<10	<1	<1	<1	7	<6	4	2	14	<1
JUL 06...	24	<.1	<10	3	<1	2	17	<6	10	10	16	40
AUG 24...	23	<.1	<10	1	<1	<1	18	<6	12	10	12	30

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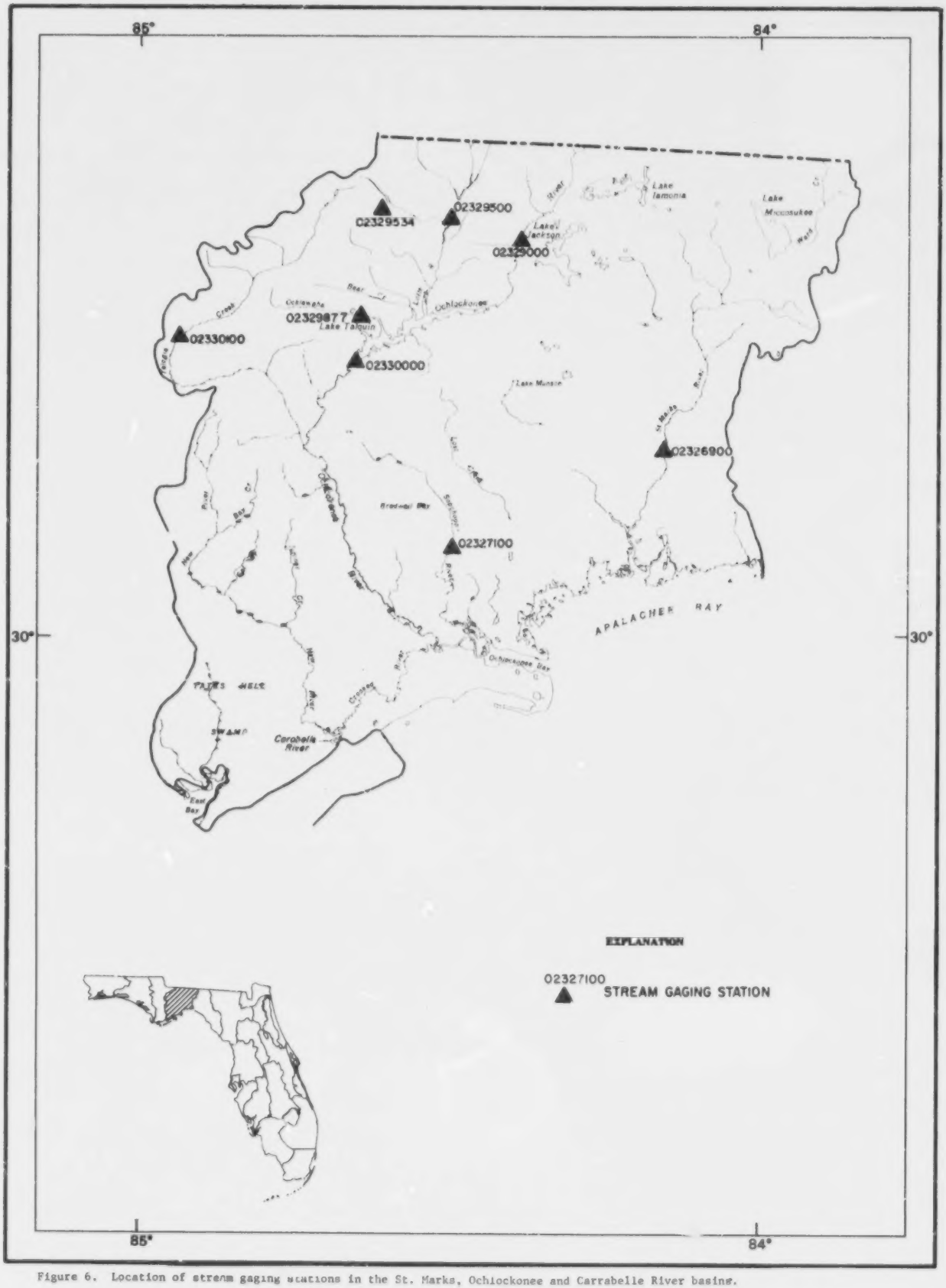

Figure 6. Location of stream gaging stations in the St. Marks, Ochlockonee and Carrabelle River basins.

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02326900 ST. MARKS RIVER NEAR NEWPORT, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°16'00", long 84°09'00", in SE¼ sec.32, T.2 S., R.2 E., Wakulla County, Hydrologic Unit 03120001, on left bank 0.9 mi downstream from Rhodes Springs, 6 mi north of Newport, 11 mi upstream from Wakulla River, and 14 mi upstream from mouth.

DRAINAGE AREA.--535 mi² including 290 mi² of Lake Miccosukee, which contributes at high stages to the St. Marks River.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1956 to September 1976. October 1976 to September 1977 (gage heights only); October 1977 to current year.

REVISED RECORDS.--WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3.53 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--28 years (water years 1957-76, 1978-84), 682 ft³/s, 494,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft³/s Apr. 7, 1973, gage height, 11.81 ft; minimum, 310 ft³/s Apr. 25, 1964, Oct. 4-6, 1968; minimum gage height, 4.20 ft Mar. 17, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 3,920 ft³/s Apr. 10, gage height, 10.26 ft; minimum daily, 613 ft³/s June 27, gage height, 5.23 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	765	697	883	1060	947	1440	1440	1040	736	648	1270	698
2	762	693	845	1000	886	1340	1440	1020	729	676	1270	690
3	759	687	811	920	853	1210	1520	1020	715	703	1180	685
4	757	683	787	863	882	1130	2310	985	704	712	1090	683
5	754	681	760	825	874	1080	2670	952	697	730	1010	685
6	751	676	759	800	868	1180	2980	930	689	722	956	681
7	749	670	754	779	889	1390	3120	909	684	699	915	677
8	748	667	741	760	876	1770	3040	896	676	677	885	673
9	750	664	726	746	843	1810	3570	898	671	667	857	668
10	759	663	715	747	815	1710	3920	886	663	665	834	661
11	764	657	738	734	794	1740	3910	873	655	659	814	658
12	764	651	844	724	783	1680	3720	861	648	660	799	655
13	773	645	847	716	808	1600	3460	841	644	659	785	652
14	780	641	878	709	822	1530	3120	821	641	663	770	650
15	773	639	912	702	823	1490	2800	805	637	675	756	645
16	765	636	875	697	830	1470	2520	792	632	694	746	641
17	758	630	838	693	825	1430	2290	781	626	691	740	639
18	756	626	830	693	805	1390	2100	774	627	691	735	638
19	749	623	822	707	786	1330	1940	766	624	706	747	637
20	744	663	816	702	771	1310	1790	759	621	759	774	637
21	740	668	826	702	762	1260	1660	751	620	823	783	634
22	736	661	823	710	765	1190	1560	744	631	856	775	633
23	735	657	796	707	769	1150	1510	760	635	887	773	630
24	731	787	764	716	765	1110	1440	780	634	908	763	627
25	727	975	736	718	762	1070	1340	780	625	872	754	625
26	723	986	724	747	759	1040	1270	770	618	829	751	621
27	718	1080	711	955	941	1150	1210	757	613	866	746	618
28	713	1120	785	1020	1120	1320	1160	746	615	882	737	616
29	709	1060	953	1100	1270	1360	1120	743	620	923	724	615
30	704	956	1000	1140	---	1440	1080	743	636	1070	716	615
31	699	---	1040	1040	---	1430	---	736	---	1200	708	---
TOTAL	23115	22142	25339	25132	24693	42550	67010	25919	19566	23872	26163	19487
MEAN	746	738	817	811	851	1373	2234	836	652	770	844	650
MAX	780	1120	1040	1140	1270	1810	3920	1040	736	1200	1270	698
MIN	699	623	711	693	759	1040	1080	736	613	648	708	615
CFSM	1.39	1.38	1.53	1.52	1.59	2.57	4.18	1.56	1.22	1.44	1.58	1.22
IN.	1.61	1.54	1.76	1.75	1.72	2.96	4.66	1.80	1.36	1.66	1.82	1.35
AC-FT	45850	43920	50260	49850	48980	84400	132900	51410	38810	47350	51890	38650

CAL YR 1983 TOTAL 338317 MEAN 927 MAX 2380 MIN 467 CFSM 1.73 IN 23.52 AC-FT 671100
WTR YR 1984 TOTAL 344988 MEAN 943 MAX 3920 MIN 613 CFSM 1.76 IN 23.99 AC-FT 684300

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02326900 ST. MARKS RIVER NEAR NEWPORT, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT 20...	1630	695	247	8.1	19.5	<1.0	8.6	93	50	49	140	12
DEC 14...	1715	860	188	7.6	17.0	1.5	4.7	49	47	130	97	10
FEB 24...	1245	593	189	7.9	17.5	2.1	7.2	76	K21	62	94	8
APR 17...	1355	2290	90	7.4	17.0	1.9	5.7	59	42	27	42	5
AUG 27...	1130	735	260	7.6	21.5	1.2	6.7	76	K10	K200	110	7

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT 28...	42	8.1	3.8	6	.1	.40	127	1.9	9.4	5.5	.20	13
DEC 14...	30	5.3	3.0	6	.1	.40	87	4.2	13	5.5	<.10	9.6
FEB 24...	29	5.3	3.3	7	.2	.40	86	2.1	6.4	5.6	.10	7.2
APR 17...	13	2.2	1.9	9	.1	.50	37	2.8	1.4	5.1	<.10	4.1
AUG 27...	35	6.5	3.0	5	.1	.40	107	5.2	6.7	5.1	.20	10

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT 28...	166	160	.23	311	.10	.030	.04	.40	.190	.58	.100	.060
DEC 14...	127	120	.17	295	.19	.080	.10	.30	.060	.18	.040	<.010
FEB 24...	107	110	.15	171	<.10	.070	.09	.30	.030	.09	.030	.030
APR 17...	68	51	.09	420	<.10	.070	.09	1.0	.050	.15	.030	.020
AUG 27...	145	130	.20	288	<.10	.030	.04	.30	.040	--	.030	.030

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
OCT 28...	.18	10	1	25	<.5	<1	2	<3	3	16	1	<4
DEC 14...	--	30	1	16	<.5	<1	<1	<3	1	150	2	<4
FEB 24...	.09	--	--	--	--	--	--	--	--	--	--	--
APR 17...	.06	60	1	9	<.5	<1	<1	<3	1	300	2	<4
AUG 27...	.09	30	1	14	<.0	<1	<1	<3	1	52	1	<4

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02326900 ST. MARKS RIVER NEAR NEWPORT, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
28...	11	.3	<10	7	<1	<1	87	<6	<3	6	11	33
DEC												
14...	11	<.1	<10	<1	<1	<1	58	<6	<3	5	12	60
FEB												
24...	--	--	--	--	--	--	--	--	--	3	4.8	33
APR												
17...	12	<.1	<10	2	<1	<1	27	<6	5	14	87	29
AUG												
27...	10	<.1	<10	1	<1	<1	75	<6	<3	4	7.9	50

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02327100 SOPCHOPPY RIVER NEAR SOPCHOPPY, FL
(Hydrologic bench-mark station)

LOCATION.--Lat 30°07'45", long 84°29'40" in NW¼ sec.24, T.4 S., R.3 W., Wakulla County, Hydrologic Unit 03120003, Apalachicola National Forest, near left bank on downstream side of bridge on U.S. Forest Road 346A, 4.7 mi north of Sopchoppy, 5.2 mi upstream from Duval Branch, and 24 mi upstream from mouth.

DRAINAGE AREA.--102 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Water years 1961-64 (annual maximum); June 1964 to current year.

REVISED RECORDS.--WSP 1905, WDR FL-76-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Jan. 27, 1961 to June 3, 1964, nonrecording gage and crest-stage gage at same site at datum 9.63 ft higher.

REMARKS.--Records good, except those for period of no gage-height record, Feb. 11 to Apr. 29, which are poor.

AVERAGE DISCHARGE.--20 years (water years 1965-84), 200 ft³/s, 26.63 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,260 ft³/s July 31, 1975, gage height, 34.47 ft, from rating curve extended above 3,500 ft³/s by velocity-area study; minimum, 1.0 ft³/s June 29 to July 3, 1968, Nov. 19, 1983; minimum gage height, 7.94 ft June 4, 5, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³)	Gage height (ft)
Apr. 5	1100	*3,530	30.93	Aug. 1	1400	2,730	28.67
Apr. 10	2200	2,580	28.15				

Minimum discharge, 1.0 ft³/s Nov. 19, gage height, 8.11 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	2.3	401	579	424	804	377	22	85	198	2700	130
2	5.4	2.1	336	477	344	647	289	19	67	424	2310	110
3	4.4	1.9	282	391	285	513	418	17	49	992	1540	103
4	3.8	1.7	247	323	481	401	2400	16	35	977	984	141
5	3.4	1.9	222	269	584	321	3470	14	24	933	663	170
6	4.0	1.7	215	231	571	432	2990	12	18	841	494	207
7	3.8	1.8	234	210	498	786	2040	11	13	631	383	203
8	3.5	1.9	203	184	415	988	1160	9.9	10	485	294	165
9	3.1	2.0	177	160	348	936	1290	11	7.8	598	217	125
10	10	2.0	150	137	292	718	2360	15	5.5	660	159	92
11	6.9	1.9	165	122	245	555	2410	10	4.1	701	115	68
12	6.3	1.8	420	106	208	430	1690	7.5	3.4	682	85	50
13	9.6	1.7	517	99	297	344	1050	6.2	3.0	648	67	37
14	14	1.7	581	88	478	280	694	5.1	3.2	583	54	28
15	16	1.7	596	78	486	228	520	4.5	7.1	450	44	21
16	13	1.6	496	70	426	183	394	3.9	4.5	334	34	17
17	12	1.5	413	65	354	147	299	3.5	3.2	256	26	13
18	11	1.4	381	65	294	118	232	3.4	2.7	238	21	11
19	9.1	1.4	344	115	245	93	180	3.2	3.2	374	19	9.0
20	7.5	20	298	136	205	79	141	3.0	9.4	462	21	7.6
21	6.4	71	252	135	176	182	111	3.0	73	509	23	6.4
22	5.6	68	212	123	177	251	88	3.0	271	601	25	5.6
23	5.1	75	181	110	180	259	82	24	583	619	26	4.9
24	5.8	136	153	117	164	237	74	57	545	571	22	4.4
25	6.1	357	126	133	141	217	61	66	507	456	34	3.9
26	5.4	420	103	165	119	208	50	78	395	335	292	3.7
27	4.6	409	86	458	413	360	42	115	291	262	535	3.3
28	3.9	434	281	665	878	676	35	130	207	424	460	3.2
29	3.3	497	684	713	921	753	29	123	149	588	334	3.1
30	2.8	464	761	633	---	640	25	124	146	1190	246	3.0
31	2.5	---	677	528	---	498	---	102	---	2270	184	---
TOTAL	205.1	2985.0	10194	7685	10649	13284	25001	1022.2	3525.1	19292	12411	1749.1
MEAN	6.62	99.5	329	248	367	429	833	33.0	118	622	400	58.3
MAX	16	497	761	713	921	988	3470	130	583	2270	2700	207
MIN	2.5	1.4	86	65	119	79	25	3.0	2.7	198	19	3.0
CFSM	.07	.98	3.23	2.43	3.60	4.21	8.17	.32	1.16	6.10	3.92	.57
IN.	.07	1.09	3.72	2.80	3.88	4.84	9.12	.37	1.29	7.04	4.53	.64
AC-FT	407	5920	20220	15240	21120	26350	49590	2030	6990	38270	24620	3470

CAL YR 1983 TOTAL 81817.3 MEAN 224 MAX 1020 MIN 1.4 CFSM 2.20 IN 29.84 AC-FT 162300
WTR YR 1984 TOTAL 108002.5 MEAN 295 MAX 3470 MIN 1.4 CFSM 2.89 IN 39.39 AC-FT 214200

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02327100 SOPCHOPPY RIVER NEAR SOPCHOPPY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1964 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
JAN											
06...	1845	214	32	4.7	7.0	1.5	8.2	68	50	K12	4
MAR											
26...	1325	207	34	4.2	17.0	--	9.2	85	28	41	--
JUL											
05...	1620	939	43	4.0	24.0	1.4	6.0	72	59	64	3
AUG											
28...	1435	470	39	--	24.0	.60	6.5	77	55	48	3

DATE	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JAN											
06...	.2	9.9	1.2	.29	1.7	.4	<.10	<1.0	1.4	5.4	<.10
MAR											
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
05...	.6	30	.71	.21	1.2	.3	<.10	<1.0	11	4.2	<.10
AUG											
28...	.6	30	.99	.17	1.0	.3	<.10	<1.0	8.4	3.8	<.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
JAN											
06...	4.0	66	.09	38	<.10	.100	.13	.90	.030	.09	.020
MAR											
26...	--	--	--	--	<.10	<.010	--	.90	--	--	.040
JUL											
05...	2.6	82	.11	208	<.10	.080	.10	.60	<.010	--	.010
AUG											
28...	3.1	66	.09	84	<.10	.090	.12	.70	.020	--	.020

DATE	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
JAN											
06...	.020	.06	360	1	9	<.5	<1	<1	<3	1	290
MAR											
26...	<.010	--	--	--	--	--	--	--	--	--	--
JUL											
05...	<.010	--	--	1	7	<.0	<1	<1	<3	--	560
AUG											
28...	.010	.03	400	1	6	<.0	<1	<1	<3	3	530

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02327100 SOPCHOPPY RIVER NEAR SOPCHOPPY, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN											
06...	<1.0	<.6	1.0	<.8	.9	<.8	.06	.03	4	2.3	25
MAR											
26...	--	--	--	--	--	--	--	--	1	.56	<0
JUL											
05...	--	--	--	--	--	--	--	--	13	33	23
AUG											
28...	--	--	--	--	--	--	--	--	15	19	13

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
JAN											
06...	5	<4	6	<.1	<10	1	<1	<1	4	<6	6
MAR											
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
05...	2	<4	5	<.1	<10	--	<1	<1	3	<6	13
AUG											
28...	2	<4	4	<.1	<10	<1	<1	<1	4	<6	15

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02329000 OCHLOCKONEE RIVER NEAR HAVANA, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°33'14", long 84°23'03", in SE¼ sec.24, T.2 N., R.2 W., Leon County, Hydrologic Unit 03120003, near left bank on downstream side of downstream bridge on divided U.S. Highway 27, 0.8 mi upstream from Seaboard Air Line Railroad bridge, 4.0 mi downstream from Mill Creek, 5.0 mi southeast of Havana, and 94 mi upstream from mouth.

DRAINAGE AREA.--1,140 mi², approximately. At site used prior to January 1929, 1,220 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1926 to current year. June 1926 to December 1929 (published as "at Ochlockonee"). Records published for both sites December 1928 to December 1929.

REVISED RECORDS.--WSP 822: 1929 (M). WSP 1504: 1928. WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 59.36 ft National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1930, nonrecording gage at site about 10 mi downstream at datum 0.36 ft lower. Dec. 12, 1928, to Nov. 17, 1963, nonrecording gage at site 100 ft upstream at present datum. Nov. 18, 1963 to Nov. 15, 1977, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--58 years, 1,045 ft³/s, 12.45 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,900 ft³/s Apr. 4, 1948, gage height, 35.08 ft; minimum, 17 ft³/s Oct. 23-28, Nov. 1, 1954; minimum gage height, 10.75 ft Oct. 31, Nov. 1, 3, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,400 ft³/s Mar. 9, gage height, 32.29 ft; minimum, 71.0 ft³/s, Nov. 8, gage height, 11.39 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163	94	750	1830	9860	3040	10200	4100	1310	296	1500	829
2	147	89	794	2030	7730	4300	8150	3240	1500	363	1680	694
3	135	84	791	1930	5960	5100	6780	2560	1530	414	2290	605
4	125	81	764	2120	6070	5090	7600	2090	1400	444	3510	540
5	117	78	720	2510	5660	4710	8200	1700	1250	475	4200	513
6	112	75	684	2180	5250	7120	10100	1410	1140	465	3970	469
7	108	73	698	2200	4820	11200	11000	1200	1030	462	3450	420
8	104	72	689	2030	4320	24700	10100	1050	878	444	2950	388
9	103	72	723	1770	4060	27600	9360	937	732	404	2450	379
10	99	74	789	1600	3820	23400	8270	844	610	356	2070	404
11	99	75	874	1400	3470	17100	7140	769	518	314	1720	422
12	104	76	1190	1200	3100	11900	6620	719	455	286	1440	404
13	109	75	1220	1200	2860	8710	6210	679	410	271	1200	370
14	109	76	1210	1160	2650	6720	5630	642	378	255	978	341
15	112	76	1680	1110	2480	5450	5000	600	359	272	788	313
16	121	75	1970	1090	2490	4580	4340	575	344	419	653	287
17	124	73	1910	1070	2700	3900	3730	583	348	554	570	264
18	125	73	2620	1000	2600	3410	3290	570	331	617	556	244
19	113	73	2630	947	2440	3020	2890	549	309	640	589	227
20	128	94	2510	910	2320	2850	2510	508	289	654	576	212
21	149	117	2440	1030	2160	3060	2230	445	281	698	570	200
22	146	153	2510	1120	2050	2960	1990	397	272	815	696	188
23	136	206	3450	1210	1940	2970	1790	401	269	857	910	178
24	128	258	3250	1330	1800	3090	1650	440	257	887	1120	168
25	128	321	3290	1460	1710	3150	1550	546	258	872	1250	159
26	122	403	2640	1680	1670	3080	1500	612	278	787	1420	152
27	123	492	2260	2290	1890	3760	1550	599	303	738	1510	144
28	119	597	2190	3010	2200	6330	2760	587	279	837	1540	137
29	113	707	1920	7880	2410	6880	5630	710	250	1050	1450	132
30	105	715	1830	11100	---	8880	5130	911	268	1360	1250	127
31	99	---	1770	11200	---	11200	---	1110	---	1500	1020	---
TOTAL	3725	5527	52766	74597	102490	239260	162900	32083	17836	18806	49876	9910
MEAN	120	184	1702	2406	3534	7718	5430	1035	595	607	1609	330
MAX	163	715	3450	11200	9860	27600	11000	4100	1530	1500	4200	829
MIN	99	72	684	910	1670	2850	1500	397	250	255	556	127
CFSM	.11	.16	1.49	2.11	3.10	6.77	4.76	.91	.52	.53	1.41	.29
IN.	.12	.18	1.72	2.43	3.34	7.81	5.32	1.05	.58	.61	1.63	.32
AC-FT	7390	10960	104700	148000	203300	474600	323100	63640	35380	37300	98930	19660

CAL YR 1983 TOTAL 567359 MEAN 1554 MAX 8480 MIN 72 CFSM 1.36 IN 18.51 AC-FT 1125000
WTR YR 1984 TOTAL 769776 MEAN 2103 MAX 27600 MIN 72 CFSM 1.85 IN 25.12 AC-FT 1527000

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02329000 OCHLOCKONEE RIVER NEAR HAVANA, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.48	11.67	16.77	21.24	27.91	23.77	28.03	24.89	19.63	13.72	20.19	17.20
2	12.30	11.61	17.01	21.82	27.02	25.04	27.20	24.08	20.29	14.27	20.76	16.45
3	12.17	11.56	17.00	21.52	26.12	25.60	26.56	23.13	20.34	14.65	22.43	15.93
4	12.05	11.52	16.85	22.04	26.18	25.60	26.96	22.04	19.83	14.87	24.34	15.52
5	11.95	11.49	16.61	23.02	25.95	25.34	27.23	20.93	19.22	15.09	24.98	15.34
6	11.89	11.44	16.40	22.20	25.70	26.71	27.99	19.99	18.73	15.01	24.80	15.04
7	11.84	11.41	16.48	22.27	25.42	28.28	28.33	19.17	18.19	15.00	24.34	14.70
8	11.79	11.40	16.43	21.81	25.07	31.64	27.98	18.48	17.46	14.87	23.70	14.46
9	11.78	11.41	16.62	21.05	24.87	32.17	27.71	17.98	16.67	14.58	22.92	14.39
10	11.72	11.43	16.99	20.52	24.68	31.41	27.26	17.53	15.96	14.21	22.00	14.5[illegible]
11	11.73	11.45	17.44	19.80	24.34	30.07	26.74	17.16	15.37	13.88	21.01	14.72
12	11.78	11.45	18.94	19.01	23.87	28.60	26.48	16.90	14.95	13.65	20.09	14.58
13	11.85	11.45	19.07	19.01	23.53	27.44	26.26	16.70	14.62	13.51	19.14	14.32
14	11.85	11.45	19.03	18.81	23.23	26.53	25.93	16.51	14.39	13.36	18.14	14.09
15	11.89	11.45	20.76	18.60	22.95	25.82	25.54	16.29	14.24	13.50	17.18	13.87
16	12.00	11.44	21.64	18.50	22.97	25.25	25.08	16.15	14.12	14.68	16.43	13.65
17	12.04	11.42	21.47	18.40	23.31	24.75	24.60	16.23	14.15	15.61	15.95	13.44
18	12.05	11.41	23.18	18.07	23.16	24.27	24.12	16.18	14.01	16.00	15.89	13.26
19	11.90	11.41	23.20	17.81	22.85	23.76	23.57	16.08	13.84	16.14	16.12	13.09
20	12.08	11.67	23.02	17.62	22.55	23.52	22.99	15.83	13.67	16.22	16.06	12.96
21	12.33	11.95	22.85	18.20	22.15	23.81	22.35	15.43	13.59	16.48	15.97	12.84
22	12.30	12.36	23.01	18.65	21.87	23.68	21.69	15.10	13.51	17.13	16.67	12.73
23	12.19	12.90	24.32	19.05	21.57	23.69	21.13	15.10	13.49	17.35	17.77	12.63
24	12.09	13.38	24.07	19.53	21.14	23.85	20.67	15.34	13.38	17.51	18.76	12.53
25	12.09	13.92	24.12	20.03	20.86	23.93	20.35	16.02	13.39	17.43	19.24	12.44
26	12.02	14.57	23.22	20.76	20.78	23.84	20.19	16.38	13.56	16.97	19.89	12.35
27	12.02	15.20	22.40	22.48	21.41	24.45	20.34	16.26	13.78	16.70	20.22	12.27
28	11.99	15.87	22.23	23.74	22.27	26.32	23.04	16.15	13.58	17.24	20.33	12.19
29	11.91	16.53	21.50	27.09	22.78	26.61	25.93	16.84	13.31	18.30	20.00	12.13
30	11.80	16.57	21.23	28.37	---	27.22	25.62	17.88	13.48	19.63	19.22	12.08
31	11.73	---	21.05	28.38	---	28.39	---	18.81	---	20.16	18.16	---
TOTAL	371.61	372.80	624.91	649.40	686.49	811.36	747.87	551.56	464.75	487.70	612.70	415.78
MEAN	11.99	12.43	20.16	20.95	23.67	26.17	24.93	17.79	15.49	15.73	19.76	13.86
MAX	12.48	16.57	24.32	28.38	27.91	32.17	28.33	24.89	20.34	20.16	24.98	17.20
MIN	11.72	11.40	16.40	17.62	20.76	23.52	20.19	15.10	13.31	13.36	15.89	12.08

CAL YR 1983 TOTAL 6568.85 MEAN 18.00 MAX 27.35 MIN 11.40
WTR YR 1984 TOTAL 6796.93 MEAN 18.57 MAX 32.17 MIN 11.40

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02329000 OCHLOCKONEE RIVER NEAR HAVANA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1962 to June 1972, October 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
DEC 15...	0905	1650	112	6.5	12.0	29	7.8	73	250	350	17	6
MAR 22...	1050	2960	62	6.5	16.0	17	5.8	59	44	44	12	4
JUL 03...	1045	405	155	7.2	24.0	19	7.0	83	59	150	33	13
AUG 27...	0845	1510	65	6.1	24.5	17	5.9	71	K100	310	15	5

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
DEC 15...	3.8	1.9	13	58	1	2.4	11	6.7	9.0	22	<.10	6.3
MAR 22...	2.6	1.3	5.5	46	.7	1.6	8.0	4.9	3.2	9.7	<.10	3.7
JUL 03...	7.9	3.1	14	46	1	2.9	20	2.4	9.2	23	.20	6.4
AUG 27...	3.6	1.5	6.1	43	.7	1.9	10	15	6.5	11	.10	5.6

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC 15...	84	66	.11	374	.27	.040	.05	.70	.160	.49	.050	.030
MAR 22...	42	33	.06	336	.22	.130	.17	.80	.120	.37	.030	.010
JUL 03...	114	80	.16	125	1.6	.190	.24	.70	.300	--	.100	.090
AUG 27...	77	43	.10	314	.26	.050	.06	.70	.140	--	.090	.060

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
DEC 15...	.09	100	1	24	<.5	<1	<1	<3	1	240	2	<4
MAR 22...	.03	90	1	18	<.5	<1	<1	<3	1	240	<1	6
JUL 03...	.28	30	1	24	<.0	1	<1	<3	4	160	2	<4
AUG 27...	.18	160	2	23	<.0	<1	<1	<3	2	590	1	<4

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 15...	39	<.1	<10	<1	<1	<1	20	<6	6	34	151	50
MAR 22...	34	<.1	<10	<1	<1	<1	14	<6	6	13	104	69
JUL 03...	32	<.1	<10	1	<1	2	41	<6	9	20	22	70
AUG 27...	22	<.1	<10	2	<1	<1	19	<6	4	20	82	60

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02329500 LITTLE RIVER NEAR QUINCY, FL

LOCATION.--Lat 30°35'14", long 84°29'48", in NW¼ sec.12, T.2 N., R.3 W., Gadsden County, Hydrologic Unit 03120003, near left bank on downstream side of bridge on State Highway 12, 0.5 mi southwest of Shady Rest, 1.1 mi downstream from confluence of Willacoochee and Attapulgus Creeks, 4.5 mi east of Quincy, and 12 mi upstream from mouth.

DRAINAGE AREA.--237 mi².

PERIOD OF RECORD.--April 1950 to March 1979; April 1979 to September 1980 (discharge measurements only); October 1980 to current year.

REVISED RECORDS.--WSP 1704: 1958, 1959; WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 83.19 ft National Geodetic Vertical Datum of 1929, unadjusted. Prior to June 5, 1978 at site 50 ft downstream at same datum.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--32 years (water years 1951-78, 1981-84), 296 ft³/s 16.95 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,600 ft³/s Sept. 22, 1969, gage height, 24.65 ft, from floodmarks; minimum, 6.7 ft³/s Oct. 5, 6, 1968, July 2, 1969, gage height, 0.52 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 28	1500	3860	13.29	Mar. 28	1600	5170	14.33
Feb. 4	2200	5510	14.29	Apr. 4	2200	5120	14.31
Feb. 28	2300	2450	12.14	Apr. 10	0400	3390	13.19
Mar. 7	0100	*16200	*17.86	Jul. 31	2200	1930	11.30

Minimum discharge, 57 ft³/s Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	62	266	762	528	1230	689	189	940	180	1430	160
2	57	62	197	424	429	773	515	192	472	414	1160	145
3	58	62	166	317	405	503	590	178	209	420	683	138
4	58	62	169	286	2620	421	3280	173	165	372	921	136
5	64	66	177	269	4050	393	3640	171	146	266	716	327
6	79	64	242	256	1890	6060	1710	177	128	182	359	771
7	69	61	464	242	1150	10300	1120	221	119	157	245	387
8	62	70	455	227	757	3270	812	156	113	131	195	195
9	60	83	293	215	538	1750	1330	139	106	117	163	156
10	64	87	224	221	463	1190	3050	126	99	125	141	139
11	63	85	268	287	423	888	1850	118	94	113	139	127
12	77	78	832	323	401	715	1190	112	93	144	297	120
13	104	73	1070	278	618	634	889	123	89	212	191	113
14	168	72	1050	243	948	593	671	124	91	160	188	106
15	145	72	696	219	1200	548	540	125	108	249	193	101
16	118	74	357	208	1020	507	466	112	116	220	172	96
17	100	75	256	232	689	467	420	99	115	204	132	94
18	140	74	287	263	478	438	408	90	109	260	117	89
19	165	71	529	355	407	412	367	89	105	430	253	87
20	130	115	566	504	374	496	335	101	96	488	237	87
21	90	307	564	482	365	887	312	169	113	393	231	85
22	78	275	391	359	422	1030	297	210	110	383	175	82
23	84	173	286	266	475	1010	350	287	214	374	176	78
24	86	212	249	285	499	710	542	294	174	254	270	74
25	80	593	220	438	455	485	382	213	189	223	420	71
26	70	834	198	583	386	456	267	182	168	201	712	70
27	66	645	191	1170	719	783	236	183	120	168	979	68
28	66	492	290	3410	1840	3920	218	207	108	174	932	66
29	66	503	718	2480	2080	2970	204	321	140	496	480	69
30	62	409	965	1290	---	1480	195	787	334	1020	244	68
31	62	---	1030	812	---	995	---	953	---	1630	187	---
TOTAL	2649	5911	13766	17706	26629	46314	26875	6621	5183	10368	12938	4305
MEAN	85.5	197	444	571	918	1494	896	214	173	334	417	144
MAX	168	834	1070	3410	4050	10300	3640	953	940	1630	1430	771
MIN	57	61	166	208	365	393	195	89	89	113	117	66
CFSM	.36	.83	1.87	2.41	3.87	6.30	3.78	.90	.73	1.41	1.76	.61
IN.	.42	.93	2.16	2.78	4.18	7.27	4.22	1.04	.81	1.63	2.03	.68
AC-FT	5250	11720	27300	35120	52820	91860	53310	13130	10280	20560	25660	8540

CAL YR 1983 TOTAL 152958 MEAN 419 MAX 5370 MIN 40 CFSM 1.77 IN 24.01 AC-FT 303400
WTR YR 1984 TOTAL 179265 MEAN 490 MAX 10300 MIN 57 CFSM 2.07 IN 28.14 AC-FT 355600

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02329534 QUINCY CREEK AT S267 AT QUINCY, FL

LOCATION.--Lat 30°36'00", long 84°34'50", in NW¼ sec.6, T.2 N., R.3 W., Gadsden County, Hydrologic Unit 03120003, at culvert on State Highway 267, 0.9 mi north of Quincy, and 6.2 mi upstream from mouth

DRAINAGE AREA.--16.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to September 1977, December 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 126.00 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Streamflow affected by city water plant withdrawal about 400 ft above gage.

AVERAGE DISCHARGE.--9 years (water years 1975-77, 1978-84), 28.1 ft³/s, 22.7 in/yr (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,470 ft³/s, March 6, 1984, gage height, 8.64 ft; minimum, 3.2 ft³/s May 16, 17, 23, 1982; minimum gage height, 0.23 ft Sept. 16, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 22, 1969, reached a stage of 14.68 ft present datum, from flood-marks, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 350 ft³/s and maximum (*).

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 11	1800	387	5.03	Mar. 27	1800	573	5.90
Jan. 27	0800	528	5.71	Apr. 3	2400	665	6.27
Feb. 4	0300	812	6.80	Apr. 9	0600	778	6.68
Feb. 27	1100	513	5.64	May 20	2300	434	5.27
Mar. 6	0900	*1470	8.64	July 30	1400	364	4.91

Minimum daily discharge, 11 ft³/s Oct. 1, 2, and Nov. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	22	28	27	43	48	32	14	33	66	22
2	11	12	20	25	26	37	44	31	14	40	82	21
3	12	12	20	24	95	35	180	30	13	46	105	21
4	14	12	23	23	508	34	361	30	13	33	50	27
5	16	13	20	22	112	93	99	29	12	24	37	36
6	17	12	49	21	68	1040	70	34	19	21	30	27
7	14	13	35	20	50	264	59	38	17	20	26	23
8	13	15	25	20	38	99	56	29	16	18	23	20
9	14	15	24	20	34	73	480	26	15	17	20	20
10	13	16	21	26	32	62	136	24	15	16	20	18
11	15	16	127	26	31	57	85	22	14	21	36	18
12	18	14	114	22	35	51	70	20	45	28	43	17
13	24	13	48	20	119	51	61	19	74	21	31	17
14	21	13	35	20	78	48	56	23	58	21	32	17
15	17	13	29	19	46	43	52	47	36	18	37	16
16	15	13	25	20	36	41	51	32	41	17	27	16
17	20	12	22	22	33	40	51	32	27	19	23	16
18	28	12	47	23	30	39	51	31	21	34	25	16
19	21	11	35	40	29	38	50	37	25	48	30	16
20	17	69	27	27	29	84	50	68	35	38	28	16
21	16	43	24	22	33	71	50	80	65	28	27	16
22	15	25	23	20	36	46	50	35	73	25	23	15
23	16	20	21	19	33	39	62	27	64	21	49	15
24	16	117	20	34	30	39	50	23	45	21	49	15
25	15	100	18	30	27	44	48	21	32	19	35	15
26	14	39	18	90	26	40	45	19	26	17	69	15
27	13	28	18	274	242	274	41	17	23	16	61	15
28	13	47	65	108	113	189	37	16	21	18	37	15
29	13	30	108	60	62	78	35	15	20	66	30	15
30	12	24	53	38	---	59	33	14	25	181	26	15
31	12	---	32	31	---	54	---	14	---	121	23	---
TOTAL	486	792	1168	1194	2058	3205	2561	915	918	1066	1200	551
MEAN	15.7	26.4	37.7	38.5	71.0	103	85.4	29.5	30.6	34.4	38.7	18.4
MAX	28	117	127	274	508	1040	480	80	74	181	105	36
MIN	11	11	18	19	26	34	33	14	12	16	20	15
CFSM	.94	1.57	2.24	2.29	4.23	6.13	5.08	1.76	1.82	2.05	2.30	1.10
IN.	1.08	1.75	2.59	2.64	4.56	7.10	5.67	2.03	2.03	2.36	2.66	1.22
AC-FT	964	1570	2320	2370	4080	6360	5080	1810	1820	2110	2380	1090

CAL YR 1983 TOTAL 11111.2 MEAN 30.4 MAX 328 MIN 9.3 CFSM 1.81 IN 24.60 AC-FT 22040
WTR YR 1984 TOTAL 16114.0 MEAN 44.0 MAX 1040 MIN 11 CFSM 2.62 IN 35.68 AC-FT 31960

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02329534 QUINCY CREEK AT S267 AT QUINCY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
FEB												
01...	1200	27	49	7.0	10.5	50	16	11.6	18	3	4.7	1.5
MAY												
22...	1115	20	44	6.6	22.5	20	7.8	7.7	14	2	3.3	1.4
JUL												
10...	1440	16	48	6.8	28.0	20	7.8	7.1	16	0	4.2	1.3

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
FEB												
01...	2.8	25	.3	.50	15	2.9	4.2	5.0	.10	4.8	46	33
MAY												
22...	2.8	30	.3	.30	12	5.8	1.0	5.1	<.10	4.7	42	26
JUL												
10...	2.9	28	.3	.40	16	4.9	.9	4.9	<.10	5.4	41	30

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
FEB											
01...	.06	3.4	<.010	.50	1	100	1	10	2	1300	4
MAY											
22...	.06	2.3	<.010	.50	<1	<100	1	10	3	1400	<1
JUL											
10...	.06	1.8	<.010	.30	1	100	<1	<10	--	1200	2

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)
FEB											
01...	50	.1	<1	<1	13	20	<.1	<.10	<.1	<.01	<.010
MAY											
22...	50	<.1	<1	<1	13	10	--	--	--	--	--
JUL											
10...	40	.2	<1	2	15	<10	<.1	<.10	<.1	<.01	<.010

DATE	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)
FEB											
01...	<.1	<.010	<.010	<.010	<.01	<.010	<.010	<.010	<.01	<.010	<.010
MAY											
22...	--	--	--	--	--	--	--	--	--	--	--
JUL											
10...	<.1	<.010	<.010	<.010	<.01	<.010	<.010	<.010	<.01	<.010	<.010

DATE	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
FEB											
01...	<.010	<.01	<.01	<.01	<.01	<1	<.01	<.01	<.01	<.01	<.01
MAY											
22...	--	--	--	--	--	--	--	--	--	--	--
JUL											
10...	<.010	<.01	<.01	<.01	<.01	<1	<.01	--	--	--	--

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02329877 OCKLAWAHA CREEK NEAR WETUMPKA, FL

LOCATION.--Lat 30°27'01", long 84°38'36", in SW¼ sec.28, T.1 N., R.4 W., Gadsden County, Hydrologic Unit 03120003, at bridge on State Highway 267, 2.5 mi south of Wetumpka.

DRAINAGE AREA.--28.8 mi².

PERIOD OF RECORD.--
DISCHARGE: 1958-59 (one or two discharge measurements each water year); October 1974 to September 1977, November 1979 to current year (discharge measurements only).
WATER TEMPERATURE: October 1975 to September 1977; January 1980 to current year. Records of periodic water temperature observations prior to October 1975 are available in files of the Geological Survey.

GAGE.--Nonrecording gage and crest-stage gage. Altitude of gage is 75 ft, from topographic map.

EXTREMES FOR PERIOD OF RECORD.--(Water years 1958-59, 1975-77, 1979-84): Maximum discharge, 2930 ft³/s Mar. 6, 1984, gage height, 6.86 ft, from rating curve extended above 664 ft³/s. Maximum measured, 664 ft³/s July 30, 1975; minimum measured, 26 ft³/s November 2, 1981.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)
NOV					MAY				
08...	1715	1.71	34	--	09...	1730	2.28	63	20.0
MAR					JUL				
05...	1600	2.30	62	13.5	06...	1230	2.10	57	22.0

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02330000 OCHLOCKONEE RIVER NEAR BLOXHAM, FL

LOCATION.--Lat 30°22'59", long 84°39'18", in NE¼ sec.20, T.1 S., R.4 W., Liberty County, Hydrologic Unit 03120003, on downstream side of right pier of bridge on State Highway 20, 3,000 ft downstream from control structure, 1.5 mi southwest of Bloxham, and 65 mi upstream from mouth.

DRAINAGE AREA.--1,700 mi², approximately.

PERIOD OF RECORD.--June 1926 to current year. Low-flow records not equivalent prior to October 1, 1954, due to undetermined amount of seepage inflow.

REVISED RECORDS.--WSP 1002: 1940-42. WSP 1704: 1958-59. WSP 1905, WDR FL-76-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 24.69 ft National Geodetic Vertical Datum of 1929. Prior to Apr. 9, 1930, nonrecording gage at site 2,700 ft upstream at datum 5.00 ft higher. Apr. 9, 1930 to Jan. 19, 1939, water-stage recorder at site 2,000 ft upstream, and Jan. 20, 1939 to Sept. 30, 1954, at present site at datum 5.00 ft higher.

REMARKS.--Records fair, missing record not estimated due to drawdown of Lake Talquin. Flow regulated since 1929 by Jackson Bluff Dam above station and storage in Lake Talquin (02329900). Since October 1981, the publication of adjusted values for storage has been discontinued since the difference between adjusted and the unadjusted values have been minimal.

AVERAGE DISCHARGE.--56 years (water years 1927-82), 1,690 ft³/s, 13.50 in/yr, unadjusted; 27 years (water years 1955-81) 1,781 ft³/s 14.23 in/yr, adjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89,400 ft³/s Sept. 23, 1969, gage height, 29.2 ft, from flood-mark; minimum discharge, since October 1954, 1.0 ft³/s Nov. 1,2, 1957, caused by closure of breaks in earth embankment of Jackson Bluff Dam (indeterminate prior to October 1954).

EXTREMES OUTSIDE THE PERIOD OF RECORD.--Maximum stage since 1834, 32.64 ft Sept. 30, 1957, from flood marks established by local resident, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 30,600 ft³/s Mar. 10, gage height, 23.91 ft; minimum, 127 ft³/s July 14, 15, 16, minimum gage height, 3.54 ft July 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	1720	3620	5450	2920	8520	5300	2120	196	5760	1600
2		---	1600	3410	6230	3890	8620	5200	2440	790	4640	594
3		---	1480	2750	6600	4280	8990	4720	3550	1480	3490	769
4		---	1400	2890	6930	4500	11100	4100	3500	1070	4250	1600
5		---	1340	3220	7230	4880	12300	2600	2600	1030	4490	2120
6		---	1270	3160	7810	7730	12300	2050	2010	886	4470	2130
7		---	1340	3110	7580	13600	12100	1970	1250	568	4400	1920
8		---	1390	3030	7270	21400	12000	1950	1030	295	3380	1460
9		297	1400	2930	7080	27100	12400	1580	899	179	2920	581
10		299	1350	2780	6660	29600	12400	1300	564	176	3500	448
11		302	1400	2570	5770	27100	12300	1290	280	160	2790	430
12		302	2000	2390	5390	20100	11600	1280	197	138	2210	426
13		301	2620	2220	4990	14700	10700	1230	204	133	2140	414
14		297	2860	2030	4680	9290	9700	1090	197	132	2120	412
15		293	2850	1870	4540	7320	8930	1060	203	132	2030	408
16		292	2900	1740	4340	7180	7130	977	196	133	1420	406
17		290	2770	1670	4140	6730	5560	787	192	133	996	488
18		288	2740	1600	3880	6050	4590	705	189	544	525	613
19		286	2910	1710	3920	4330	4550	698	192	1550	579	618
20		355	3160	1750	3450	3990	4280	694	189	3140	1120	621
21		532	3400	1770	3200	4540	3780	693	181	3410	2400	430
22		624	3460	1770	2770	4520	3380	691	181	2840	1870	204
23		637	3330	1750	2810	4500	2920	775	244	2240	1180	196
24		727	3310	1780	2400	4490	2350	1020	168	2140	1560	196
25		1060	3430	1900	2160	4460	2300	1070	157	1900	2120	196
26		1240	3520	2180	1390	4460	2330	1600	151	1410	2240	194
27		1340	3410	3030	583	4760	2640	1680	148	855	3200	191
28		1580	3230	3880	535	6070	2670	1670	141	816	3280	191
29		1860	3560	4620	862	7710	3080	1780	141	826	2830	192
30		1840	3890	5050	---	8170	4630	2160	150	3030	1970	192
31		---	3830	4970	---	8340	---	2130	---	6810	2090	---
TOTAL		---	78870	83150	130650	288710	220150	55850	23664	39142	81970	20240
MEAN		---	2544	2682	4505	9313	7338	1802	789	1263	2644	675
MAX		---	3890	5050	7810	29600	12400	5300	3550	6810	5760	2130
MIN		---	1270	1600	535	2920	2300	691	141	132	525	191
CFSM		---	1.50	1.58	2.65	5.48	4.32	1.06	.46	.74	1.56	.40
IN.		---	1.73	1.82	2.86	6.32	4.82	1.22	.52	.86	1.79	.44
AC-FT		---	156400	164900	259100	572700	436700	110800	46940	77640	162600	40150

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02330100 TELOGIA CREEK NEAR BRISTOL, FL

LOCATION.--Lat 30°25'35", long 84°55'40", in NW¼ sec.3, T.1 S., R.7 W., Liberty County, Hydrologic Unit 03120003, near left bank at downstream side of bridge on State Highway 20, 600 ft upstream from White Branch, 3.0 mi east of Bristol, and 33 mi upstream from mouth.

DRAINGAGE AREA.--126 mi².

PERIOD OF RECORD.--March 1950 to September 1971, October 1974 to September 1979, October 1980 to current year.

REVISED RECORDS.--WSP 1504: 1950-51, 1953 (M), 1955-56.

GAGE.--Water-stage recorder. Datum of gage is 99.50 ft National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Records poor. No gage height record, Oct. 5 to Nov.8, Mar. 31 to May 9, June 22 to July 8, Aug. 31 to Sept. 30.

AVERAGE DISCHARGE.--30 years, (water years 1951-71, 1975-79, 1981-84) 223 ft³/s, 24.03 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,500 ft³/s Sept. 22, 1969, gage height, 16.65 ft, from floodmark; minimum, 28 ft³/s Sept. 14, Oct. 26, 27, 1954, gage height, 1.35 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage Height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Jan. 28	1700	1,630	7.50	Feb. 28	1800	1,830	7.67
Feb. 5	1200	2,140	7.92	Mar. 7	0200	*10,900	*12.86
Feb. 14	1600	2,220	7.98	July 31	1000	1,930	7.76

Minimum daily discharge, 62 ft³/s Nov. 6, estimated.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	78	188	365	259	610	430	210	292	270	1430	155
2	74	75	151	229	210	398	380	210	173	300	1010	150
3	72	71	136	188	213	308	360	200	148	290	1230	140
4	73	67	134	172	780	266	380	195	134	275	1120	195
5	81	64	139	162	1870	269	1050	190	125	240	695	245
6	100	62	150	156	1120	4350	1150	200	116	175	611	290
7	88	68	212	151	621	7420	800	250	111	150	501	280
8	80	80	242	146	423	1700	600	230	109	130	315	235
9	76	84	177	141	317	934	400	200	102	188	247	200
10	82	83	143	148	264	659	350	183	98	144	211	180
11	78	79	209	194	237	525	400	161	94	145	206	165
12	98	75	602	222	224	446	750	145	92	395	274	160
13	135	73	1020	179	465	408	1200	139	93	868	279	145
14	210	72	680	154	1640	390	1350	133	93	481	240	140
15	185	72	383	146	1180	359	1050	128	106	324	242	135
16	155	74	249	141	632	321	780	123	111	470	201	130
17	130	75	188	147	428	296	470	120	101	339	178	125
18	180	73	168	159	323	284	400	115	96	421	165	120
19	210	72	195	235	259	264	370	111	104	536	250	115
20	170	133	226	321	216	325	350	109	99	607	689	115
21	115	258	188	286	212	635	330	110	101	471	368	115
22	100	297	162	183	235	882	320	123	110	343	277	110
23	110	179	154	157	278	549	390	179	200	245	211	105
24	110	287	149	176	267	360	600	243	180	189	234	98
25	100	720	142	244	223	313	420	252	185	175	285	94
26	90	958	133	321	196	331	300	310	170	165	250	94
27	85	514	131	689	449	482	260	322	120	306	230	90
28	86	284	165	1420	1320	921	240	321	105	226	333	88
29	84	264	383	1080	1160	1170	230	343	135	285	232	92
30	80	263	678	574	---	863	215	412	240	1040	179	90
31	79	---	647	366	---	600	---	555	---	1860	160	---
TOTAL	3391	5554	8524	9252	16021	27638	16325	6522	3943	12053	12853	4396
MEAN	109	185	275	298	552	892	544	210	131	389	415	147
MAX	210	958	1020	1420	1870	7420	1350	555	292	1860	1430	290
MIN	72	62	131	141	196	264	215	109	92	130	160	88
CFSM	.87	1.47	2.18	2.37	4.38	7.08	4.32	1.67	1.04	3.09	3.29	1.17
IN.	1.00	1.64	2.52	2.73	4.73	8.16	4.82	1.93	1.16	3.56	3.79	1.30
AC-FT	6730	11020	16910	18350	31780	54820	32380	12940	7820	23910	25490	8720

CAL YR 1983 TOTAL 94026 MEAN 258 MAX 1970 MIN 62 CFSM 2.05 IN 27.76 AC-FT 186500
WTR YR 1984 TOTAL 126472 MEAN 346 MAX 7420 MIN 62 CFSM 2.75 IN 37.34 AC-FT 250900

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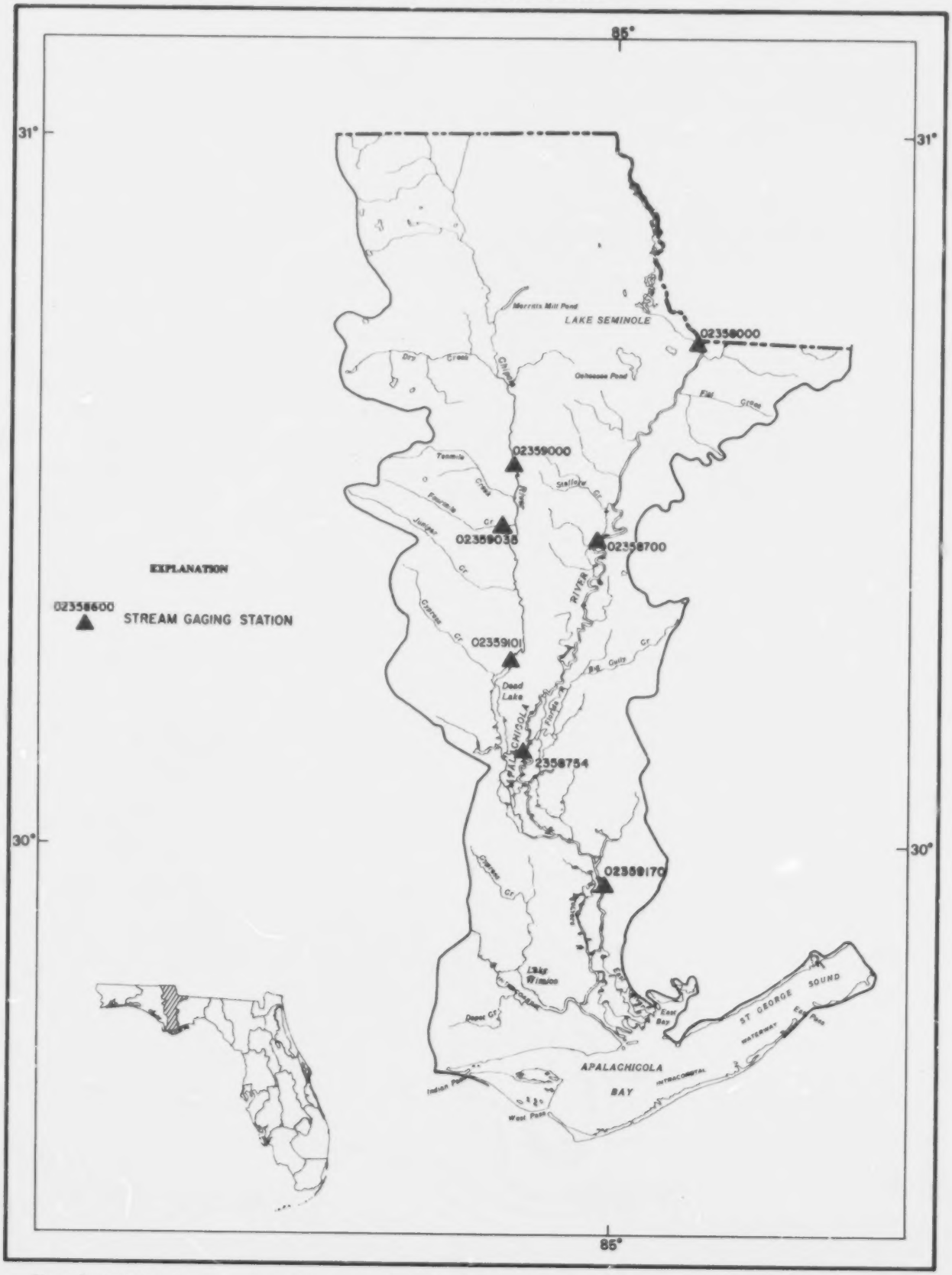

Figure 7. Location of stream gaging stations in the Apalachicola and Chipola River basins.

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02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°42'03", long 84°51'33", in NW¼ sec.32, T.4 N., R.6 W., Jackson County, Hydrologic Unit 03130011, on downstream side of right main pier on U.S. Highway 90, 0.6 mi downstream from Jim Woodruff Dam, 0.6 mi upstream from Mosquito Creek, 1.0 mi west of Chattahoochee, and 106 mi upstream from mouth.

DRAINAGE AREA.--17,200 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for some periods, published in WSP 1304. Prior to October 1939, published as "near River Junction." Gage-height records collected at site 0.9 mi downstream October 1919 to September 1925, and at site approximately 100 ft downstream October 1925 to December 1958 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1906: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 40.58 ft National Geodetic Vertical Datum of 1929 (National Weather Service bench mark). Prior to Dec. 16, 1939, water-stage recorder at site 0.9 mi downstream at datum 4.27 ft higher. Dec. 16, 1939 to June 25, 1952, water-stage recorder, June 26, 1952 to June 2, 1954, nonrecording gage, and June 3, 1954 to Oct. 14, 1958, water-stage recorder, at site approximately 100 ft downstream at datum 5.00 ft higher.

REMARKS.--Records good. Flow regulated by Lake Seminole Reservoir (02357500) 0.6 mi upstream since Feb. 4, 1957, Walter F. George Lake (02343240) since 1962, Bartlett's Ferry Reservoir (02341000) since 1926, West Point Lake (02339400) since October 1974, and Lake Sidney Lanier Reservoir (02334400) since 1956.

AVERAGE DISCHARGE.--56 years, 22,566 ft³/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 293,000 ft³/s Mar. 20, 1929, gage height, 38.97 ft, present datum, extended above 193,000 ft³/s; minimum, 4,690 ft³/s Nov. 11, 1981, gage height, -0.82 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 79,200 ft³/s Mar. 7, gage height, 22.72 ft; minimum, 9,550 ft³/s Sept. 26, gage height, 1.53 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11100	13500	36900	46800	46600	49900	43500	32100	36600	12800	36700	17800
2	11100	13600	37600	36600	45600	55900	39100	29800	31700	13600	49400	18100
3	11500	13500	34600	35000	43800	51600	44700	31100	22200	14300	58300	18400
4	11200	13500	34300	42200	44200	40900	52300	42100	20700	14400	60800	18400
5	10800	13700	38300	43800	36900	41800	50600	50400	21800	14000	56500	18500
6	12700	13800	49100	39000	32400	69000	45000	52600	22600	13600	55400	18400
7	13000	13700	55300	31100	30200	75600	41400	58800	20900	13500	48700	18100
8	11900	13700	61100	24100	29100	72200	40900	55100	19400	13500	44000	18000
9	10800	13600	62600	21400	30300	73900	40900	56400	18100	13600	42400	18000
10	11000	13500	62300	24700	31700	71200	44300	51800	18200	13600	35800	18100
11	11000	13900	63500	30100	27900	66400	38900	46100	17900	13500	26900	16300
12	10800	13900	71200	31200	23200	61300	38200	38600	17200	13600	23200	17400
13	12300	13900	75000	31500	41200	57900	37100	32700	15200	13500	20500	16200
14	14000	14200	69400	24600	38300	54400	35000	29700	14700	13400	19200	16200
15	13300	14400	60400	24600	37400	50300	36100	27900	14700	13500	19600	15300
16	13500	12300	57300	29300	39600	46200	31900	29000	14700	13800	21600	14000
17	13500	11400	55400	36300	43400	39700	30000	26700	14500	13800	19900	14100
18	13600	10800	46400	41000	44300	27300	32200	20400	15200	13800	20100	14200
19	13500	10900	45200	45700	43600	27100	29400	18800	15500	13700	19300	14000
20	13300	11500	46600	43200	42500	39400	29000	18700	15900	13900	24100	14000
21	13200	11400	41400	37300	41900	43500	28800	18200	15000	14400	24300	14000
22	13800	11200	39400	35900	42000	47100	25700	18000	14000	17000	23600	13700
23	13400	11200	35100	36800	43500	43000	27300	18800	14100	16200	24600	12900
24	12500	12800	30200	43900	41400	39100	32800	18400	14100	20800	26700	12800
25	13500	14700	31900	53400	34800	38500	39500	18800	13600	21500	21300	10500
26	13400	14500	30100	60200	25000	41600	39400	22400	13100	20200	18800	10300
27	13500	16700	27900	66200	28400	46600	37800	20500	13000	18400	18900	10500
28	13400	21300	27800	69700	41000	51500	36800	21700	13000	18000	18900	10500
29	13400	27200	39700	68100	48100	55200	33700	30400	13400	18100	19000	10600
30	13400	32600	49000	61000	---	56000	32800	32700	13700	19800	18300	10500
31	13500	---	48800	52400	---	51700	---	35400	---	26200	17800	---
TOTAL	391700	436900	1463800	1267100	1098300	1586000	1115100	1004100	524700	484000	934600	451800
MEAN	12640	14560	47220	40870	37870	51160	37170	32390	17490	15610	30150	15060
MAX	14000	32600	75000	69700	48100	75800	52300	58800	36600	26200	60800	18500
MIN	10800	10800	27800	21400	23200	27100	25700	18000	13000	12800	17800	10300
CFSM	.74	.85	2.75	2.38	2.20	2.97	2.16	1.88	1.02	.91	1.75	.88
IN.	.85	.94	3.17	2.74	2.38	3.43	2.41	2.17	1.13	1.05	2.02	.98
AC-FT	776900	866600	2903000	2513000	2178000	3146000	2212000	1992000	1041000	960000	1854000	896100

CAL YR 1983 TOTAL 11054300 MEAN 30290 MAX 98600 MIN 10800 CFSM 1.76 IN 23.91 AC-FT 21930000
WTR YR 1984 TOTAL 10758100 MEAN 29390 MAX 75800 MIN 10300 CFSM 1.71 IN 23.27 AC-FT 21340000

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02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.29	3.51	12.60	15.61	15.57	16.39	14.78	11.41	12.54	3.15	12.52	5.55
2	2.32	3.54	12.80	12.96	15.33	17.79	13.66	10.61	10.99	3.53	15.80	5.69
3	2.50	3.50	11.96	12.52	14.86	16.77	15.09	11.00	7.41	3.92	17.87	5.80
4	2.35	3.50	11.88	14.46	14.97	14.12	16.95	14.03	6.80	3.96	18.43	5.82
5	2.14	3.59	12.99	14.88	13.04	14.33	16.53	16.11	7.28	3.77	17.48	5.85
6	3.10	3.64	15.72	13.61	11.79	20.59	15.18	16.60	7.59	3.57	17.22	5.80
7	3.26	3.61	17.21	11.38	11.04	22.05	14.26	17.99	6.88	3.49	15.63	5.66
8	2.71	3.61	18.50	8.64	10.62	21.30	14.11	17.14	6.24	3.53	14.47	5.64
9	2.17	3.54	18.84	7.53	11.08	21.66	14.10	17.44	5.67	3.56	14.07	5.62
10	2.26	3.52	18.76	8.89	11.60	21.10	15.01	16.37	5.74	3.56	12.24	5.68
11	2.24	3.69	19.03	10.99	10.10	20.09	13.59	15.00	5.59	3.52	9.30	5.79
12	2.17	3.72	20.64	11.43	8.23	18.99	13.41	13.06	5.27	3.54	7.83	5.37
13	2.90	3.71	21.43	11.39	14.20	18.24	13.09	11.44	4.35	3.50	6.70	4.82
14	3.73	3.85	20.31	8.86	13.45	17.44	12.51	10.41	4.07	3.43	6.15	4.82
15	3.39	3.95	18.43	8.86	13.19	16.47	12.94	9.70	4.12	3.48	6.31	4.39
16	3.42	2.91	17.79	10.69	13.77	15.47	11.64	10.13	4.10	3.63	7.17	3.77
17	3.50	2.47	17.41	12.88	14.76	13.77	10.94	9.24	4.01	3.65	6.47	3.80
18	3.55	2.15	15.31	14.16	15.01	9.93	11.73	6.66	4.34	3.66	6.54	3.87
19	3.51	2.18	15.05	15.35	14.81	9.77	10.72	6.00	4.48	3.62	6.22	3.77
20	3.38	2.52	15.45	14.72	14.55	13.71	10.61	5.96	4.67	3.68	8.19	3.77
21	3.38	2.46	14.16	13.17	14.38	14.79	10.51	5.73	4.27	3.96	8.30	3.73
22	3.65	2.35	13.69	12.78	14.39	15.70	9.30	5.65	3.74	5.13	8.01	3.60
23	3.44	2.35	12.55	13.04	14.79	14.67	9.88	6.01	3.81	4.80	8.39	3.22
24	3.50	3.17	11.03	14.87	14.25	13.66	11.86	5.82	3.78	6.84	9.25	3.13
25	3.49	4.12	11.66	17.19	12.42	13.49	13.66	5.97	3.56	7.14	7.06	1.99
26	3.47	4.01	10.96	18.75	9.01	14.31	13.61	7.50	3.30	6.58	6.00	1.89
27	3.48	5.06	10.18	20.05	10.28	15.58	13.14	6.70	3.28	5.82	6.04	2.02
28	3.47	7.04	10.14	20.80	14.11	16.77	12.85	7.23	3.26	5.66	6.03	2.02
29	3.44	9.46	13.75	20.45	15.93	17.63	11.97	10.68	3.44	5.69	6.07	2.05
30	3.46	11.40	16.17	18.94	---	17.81	11.68	11.42	3.60	6.40	5.76	2.00
31	3.51	---	16.12	16.96	---	16.80	---	12.18	---	9.03	5.56	---
TOTAL	95.18	118.13	472.52	426.81	381.53	511.19	389.21	331.19	158.18	138.80	303.08	126.93
MEAN	3.07	3.94	15.24	13.77	13.16	16.49	12.97	10.68	5.27	4.48	9.78	4.23
MAX	3.73	11.40	21.43	20.80	15.93	22.05	16.95	17.99	12.54	9.03	18.43	5.85
MIN	2.14	2.15	10.14	7.53	8.23	9.77	9.30	5.65	3.26	3.15	5.56	1.89

CAL YR 1983 TOTAL 3364.63 MEAN 9.22 MAX 22.64 MIN 2.14
WTR YR 1984 TOTAL 3452.75 MEAN 9.43 MAX 22.05 MIN 1.89

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02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1962 to June 1972, January 1974 to current year.

REMARKS.--Sediment data published for period November 1981 to September 1984.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
JAN												
05...	1400	45500	84	7.5	7.0	17	14.5	120	200	84	27	2
APR												
05...	1140	52700	79	7.7	16.5	15	10.4	107	80	K360	26	2
JUN												
29...	1740	13400	164	8.0	28.5	6.2	7.6	98	K11	260	61	4
AUG												
22...	1525	22900	90	7.0	28.5	6.5	6.8	88	K10	K140	35	1

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
JAN												
05...	9.0	1.1	4.4	25	.4	1.6	25	1.5	9.2	4.5	<.10	7.7
APR												
05...	8.6	1.0	4.4	26	.4	1.2	24	.9	6.3	4.4	<.10	6.7
JUN												
29...	22	1.4	4.5	14	.3	1.0	57	1.1	5.1	4.3	.10	5.6
AUG												
22...	12	1.3	4.9	22	.4	1.4	34	6.6	7.9	4.0	<.10	5.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
JAN												
05...	56	53	.03	6880	.50	.090	.12	.90	050	.15	.020	.020
APR												
05...	47	47	.06	6690	.36	.170	.22	.50	.030	.09	<.010	<.010
JUN												
29...	85	79	.12	3080	.37	.130	.17	.40	.030	--	--	<.010
AUG												
22...	75	58	.10	4640	.19	.020	.03	.60	.020	--	<.010	<.010

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
JAN												
05...	.06	10	1	25	<.5	<1	<1	<3	1	88	2	<4
APR												
05...	--	50	<1	19	<.5	<1	<1	<3	2	150	<1	<4
JUN												
29...	--	20	1	25	<.0	<1	<1	<3	3	42	2	<4
AUG												
22...	--	50	1	23	<.0	<1	1	<3	<1	56	1	<4

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02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)
JAN											
05...	13	<.1	<10	1	<1	<1	23	<6	7	<1.1	<1.1
APR											
05...	8	<.1	<10	1	<1	<1	23	<6	7	--	--
JUN											
29...	59	<.1	<10	1	<1	2	31	<6	5	<1.5	.8
AUG											
22...	8	<.1	<10	<1	<1	<1	29	<6	5	--	--

DATE	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	TRITIUM IN WATER MOLECULES (TU)	TRITIUM WATER MOLECULES COUNT ERROR (TU)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN											
05...	1.9	<1.4	1.7	<1.3	46.1	1.9	.03	.09	10	1230	--
APR											
05...	--	--	--	--	--	--	--	--	17	2420	--
JUN											
29...	1.9	.7	1.6	.6	25.1	1.2	.08	.05	12	434	67
AUG											
22...	--	--	--	--	--	--	--	--	14	866	79

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
NOV , 1981						
20...	1240	-.40	1310	5580	13	196
20...	1243	-.39	1310	5600	13	197
20...	1255	-.47	1250	5430	13	191
20...	1258	-.49	1250	5380	13	189
20...	1305	-.51	1230	5340	11	159
20...	1310	-.52	1230	5320	11	158
20...	1315	-.53	1200	5300	11	157
20...	1319	-.54	1200	5280	11	157
20...	1325	-.56	1170	5230	12	169
20...	1329	-.57	1170	5210	12	169
20...	1340	-.63	1140	5080	12	165
20...	1344	-.65	1140	5040	12	163
20...	1352	-.67	1090	5000	12	162
20...	1356	-.67	1090	5000	12	162
20...	1403	-.68	965	4980	10	134
20...	1411	-.67	965	5000	10	135
JAN , 1982						
26...	1000	6.69	1310	20400	17	936
26...	1023	6.70	1230	20500	11	609
26...	1040	6.69	1200	20400	15	826
26...	1059	6.68	1170	20400	10	551
26...	1111	6.70	1090	20500	14	775
26...	1125	6.73	965	20500	14	775
FEB						
04...	1522	20.88	965	72300	83	16200
04...	1548	20.94	1090	72600	85	16700
04...	1613	21.05	1170	73100	81	16000
04...	1642	21.21	1230	73900	59	11800
04...	1716	21.30	1310	74400	68	13700
05...	1329	22.46	965	80200	46	9960
05...	1349	22.42	1090	80000	50	10800
05...	1420	22.43	1170	80000	54	11700
05...	1455	22.26	1200	79200	55	11800
05...	1535	22.18	1230	78800	54	11500
05...	1605	22.08	1310	78300	50	10600
10...	1225	18.10	965	59300	20	3200
10...	1300	18.01	1090	58900	20	3180
10...	1320	18.02	1170	58900	19	3020
10...	1345	17.98	1230	58800	19	3020
10...	1407	17.98	1310	58800	18	2860

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02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
MAR , 1982						
02...	1406	7.89	965	23300	18	1130
02...	1416	7.93	1090	23400	10	632
02...	1424	7.94	1170	23400	26	1640
02...	1430	7.94	1230	23400	20	1260
02...	1437	7.98	1310	23500	14	888
MAY						
21...	1414	3.47	965	13400	10	362
21...	1434	3.45	1090	13400	8	289
21...	1456	3.42	1170	13300	7	251
21...	1515	3.41	1230	13300	10	359
21...	1530	3.42	1310	13300	10	359
MAR , 1983						
07...	1424	19.35	965	65000	16	2810
07...	1429	19.35	965	65000	21	3690
07...	1438	19.36	1090	65000	23	4040
07...	1442	19.36	1090	65000	24	4210
07...	1446	19.39	1140	65200	24	4220
07...	1449	19.39	1140	65200	24	4220
07...	1455	19.40	1170	65200	24	4220
07...	1458	19.40	1170	65200	26	4580
07...	1502	19.40	1200	65200	20	3520
07...	1504	19.40	1200	65200	24	4220
07...	1508	19.41	1230	65300	25	4410
07...	1511	19.41	1230	65300	25	4410
07...	1515	19.42	1250	65300	26	4580
07...	1517	19.42	1250	65300	26	4580
07...	1522	19.42	1310	65300	26	4580
07...	1524	19.42	1310	65300	23	4060
08...	1500	22.56	965	80700	26	5670
08...	1515	22.56	965	80700	30	6540
08...	1539	22.57	1090	80800	35	7640
08...	1544	22.57	1090	80800	31	6760
08...	1600	22.63	1170	81000	40	8750
08...	1605	22.63	1170	81000	44	9620
08...	1612	22.61	1230	81000	46	10100
08...	1616	22.61	1230	81000	39	8530
08...	1624	22.64	1310	81100	44	9630
08...	1628	22.64	1310	81100	42	9200
14...	1134	17.32	965	55800	18	2710
14...	1137	17.32	965	55800	16	2410
14...	1143	17.31	1090	55800	15	2260
14...	1146	17.31	1090	55800	15	2260
14...	1153	17.32	1140	55800	15	2260
14...	1157	17.32	1140	55800	14	2110
14...	1201	17.33	1200	55900	15	2260
14...	1203	17.33	1200	55900	14	2110
14...	1208	17.29	1230	55700	16	2410
14...	1210	17.28	1230	55700	16	2410
14...	1215	17.26	1250	55600	15	2250
14...	1218	17.16	1250	55100	14	2080
14...	1224	16.99	1310	54400	18	2640
14...	1226	16.93	1310	54100	17	2480
JUL						
08...	1239	6.81	965	20700	7	391
08...	1248	6.80	1090	20700	7	391
08...	1259	6.82	1140	20800	10	562
08...	1310	6.81	1170	20700	10	559
08...	1327	6.81	1200	20700	9	503
08...	1343	6.83	1230	20800	10	562
08...	1355	6.81	1250	20700	12	671
08...	1409	6.80	1310	20700	15	838
JAN , 1984						
05...	1224	14.89	965	45600	10	1230
05...	1230	14.89	965	45600	10	1230
05...	1244	14.62	1090	44600	10	1200
05...	1252	14.70	1090	44900	9	1090
05...	1306	14.81	1170	45300	10	1220
05...	1312	14.82	1170	45400	10	1230
05...	1329	15.02	1310	46200	11	1370
05...	1341	14.89	1310	45600	10	1230
05...	1359	14.85	1230	45500	--	--
05...	1409	14.68	1230	44800	10	1210

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02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

SUSPENDED SEDIMENT DISCHARGE

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
FEB , 1984						
02...	1210	15.33	965	47400	13	1660
02...	1220	15.32	965	47400	13	1660
02...	1236	15.28	1090	47200	12	1530
02...	1242	15.28	1090	47200	13	1660
02...	1307	15.29	1170	47300	13	1660
02...	1326	15.29	1170	47300	13	1660
02...	1339	15.11	1230	46500	12	1510
02...	1343	15.02	1230	46200	13	1620
02...	1359	14.86	1310	45500	13	1600
02...	1404	14.89	1310	45600	12	1480
APR						
05...	1055	16.66	965	53000	15	2150
05...	1105	16.59	965	52700	15	2130
05...	1119	16.59	1090	52700	16	2280
05...	1127	16.63	1090	52900	14	2000
05...	1138	16.59	1170	52700	19	2700
05...	1147	16.55	1170	52500	19	2690
05...	1201	16.55	1230	52500	16	2270
05...	1214	16.56	1230	52600	17	2410
05...	1228	16.54	1310	52500	22	3120
05...	1236	16.53	1310	52400	19	2690
MAY						
07...	1237	18.11	965	59300	31	4960
07...	1258	17.99	1090	58800	30	4760
07...	1315	17.99	1170	58800	38	6030
07...	1333	17.94	1230	58600	41	6490
07...	1351	17.95	1310	58600	50	7910
JUN						
26...	1555	3.30	965	13100	7	248
26...	1600	3.31	965	13100	7	248
26...	1610	3.30	1090	13100	7	248
26...	1612	3.30	1090	13100	8	283
26...	1623	3.31	1170	13100	10	354
26...	1629	3.31	1170	13100	8	283
26...	1639	3.31	1230	13100	9	318
26...	1645	3.31	1230	13100	9	318
26...	1656	3.31	1310	13100	9	318
26...	1658	3.31	1310	13100	10	354
AUG						
06...	1214	17.07	965	54800	13	1920
06...	1222	17.02	965	54500	13	1910
06...	1237	16.96	1090	54300	14	2050
06...	1247	16.91	1090	54100	14	2040
06...	1304	16.82	1170	53700	15	2170
06...	1310	16.82	1170	53800	15	2180
06...	1328	16.82	1230	53700	16	2320
06...	1332	16.82	1230	53700	16	2320
06...	1348	16.81	1310	53600	16	2320
06...	1352	16.86	1310	53800	16	2320
SEP						
18...	1055	3.86	965	14200	18	690
18...	1058	3.86	965	14200	16	613
18...	1110	3.86	1090	14200	18	690
18...	1113	3.86	1090	14200	17	652
18...	1126	3.87	1170	14200	17	652
18...	1134	3.87	1170	14200	17	652
18...	1151	3.86	1230	14200	17	652
18...	1157	3.86	1230	14200	17	652
18...	1210	3.86	1310	14200	17	652
18...	1218	3.86	1310	14200	16	613

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02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM	BED MAT. SIEVE DIAM. % FINER THAN .125 MM	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
NOV , 1981												
20...	1316	1200	--	--	2	22	41	53	60	68	89	100
20...	1339	1140	--	--	1	14	32	47	61	83	100	--
20...	1400	965	1	1	1	6	15	20	57	87	100	--
FEB , 1982												
11...	1415	1040	--	--	0	6	16	26	38	57	89	100
11...	1535	1300	--	--	1	11	28	42	57	74	93	100
MAY												
21...	1615	1200	--	0	1	9	19	24	27	32	65	100
21...	1630	1040	--	--	2	18	44	61	72	84	97	100
21...	1700	965	--	--	1	18	43	61	74	84	95	100
JUL , 1983												
08...	1445	1200	--	--	--	1	6	12	25	60	100	0
08...	1600	1040	--	--	--	--	--	--	1	10	87	100
08...	1645	965	--	--	1	9	18	27	39	68	97	100
APR , 1984												
05...	1355	1040	--	--	1	4	13	23	36	55	92	100
05...	1445	1300	--	1	3	25	62	77	86	93	100	--
SEP												
18...	1324	965	--	1	2	5	12	25	64	94	100	--
18...	1402	1140	--	--	--	1	2	5	13	33	84	100
18...	1430	1200	1	2	4	24	77	89	93	97	100	--

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02358700 APALACHICOLA RIVER NEAR BLOUNTSTOWN, FL

LOCATION.--Lat 30°25'30", long 85°01'53", in NE¼ sec.3, T.1 S., R.8 W., Calhoun County, Hydrologic Unit 03130011, on right bank 500 ft upstream from Neal Lumber Company Landing at McNeal, 0.5 mi upstream from Old River cutoff, 1.5 mi southeast of Blountstown, and 78 mi upstream from mouth.

DRAINAGE AREA.--17,600 mi, approximately.

PERIOD OF RECORD.--January 1920 to September 1957 gage-height records collected in this vicinity by the National Weather Service are in the files of the Geological Survey. Miscellaneous discharge measurements from some periods August 1938 to August 1957 are in files of Corps of Engineers. October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 26.96 ft National Geodetic Vertical Datum of 1929 (National Weather Service bench mark). Prior to Sept. 17, 1921, nonrecording gage near present site at different datum. Sept. 17, 1921 to Aug. 28, 1957, nonrecording gage at several sites within 500 ft of present site at present datum. Since Aug. 26, 1960, auxiliary nonrecording gage at site 2.2 mi upstream at bridge on State Highway 20, at present datum.

COOPERATION.--Records from October 1957 to current year, were collected and computed by Corps of Engineers and were reviewed by Geological Survey.

AVERAGE DISCHARGE.--27 years, 24,467 ft³/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 172,000 ft³/s Jan. 29, 1978, gage height, 24.75 ft; minimum daily, 6,280 ft³/s Oct. 29, 1962; minimum gage height, 1.53 ft Sept. 30, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1920, 28.6 ft present datum, Mar. 21, 1929, discharge not determined, from National Weather Service records.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 78,200 ft³/s Mar. 8; minimum daily, 10,900 ft³/s Sept. 26, 27, 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11200	13800	31400	45400	49200	44400	47800	33400	34200	13500	31000	17700
2	11200	13800	33200	41300	45300	47800	41500	31400	34000	13500	38400	17900
3	11300	13800	34200	40400	43900	51200	42100	30600	26800	15000	45700	18100
4	11300	13800	32600	37200	44400	45800	48300	34100	22500	18200	52000	18300
5	11200	13900	32600	40600	41700	41100	50500	41800	21300	15800	53400	18500
6	11700	14100	37000	40000	36400	54200	47500	44500	22700	14100	52000	18300
7	12500	14100	43800	35700	33300	77100	43400	49400	21400	13700	48600	18200
8	12400	14100	48100	29500	31100	78200	41600	52000	20400	13500	44300	18000
9	11400	14000	53500	24400	30800	75800	41400	50600	18700	13500	41300	17900
10	11200	13800	53500	23800	31800	76300	43600	50400	18200	13500	38500	17900
11	11200	13900	58000	28300	31100	70800	41800	47000	18100	13500	31700	18100
12	11200	14100	59000	30800	26100	65300	39200	41600	17700	13500	26400	18100
13	11500	14000	67200	32600	32500	59700	38300	36100	16600	13500	23000	16700
14	13400	14100	70800	28100	37900	55100	36300	32600	15400	13300	20500	16400
15	13400	14300	66700	25700	37400	51500	36500	29400	15100	13400	19300	16200
16	13200	13500	57700	27500	37300	47700	35200	29000	15000	13500	21300	14600
17	13400	12000	54800	32100	39500	44000	32000	28400	14800	13700	20000	14200
18	13500	11400	49900	36900	41100	35500	32800	23800	14800	13900	20400	14300
19	13700	11000	45000	40800	42000	29200	32100	20200	15400	13900	19200	14200
20	13300	11400	44300	42600	41400	34300	30400	19200	15600	13900	21900	14000
21	13300	11700	43000	39700	40900	38300	30400	18900	15700	18900	23600	14000
22	13800	11500	40100	37100	40500	42700	28900	18200	14900	22000	23700	13800
23	13600	11300	38100	36100	41100	43200	27100	18700	15500	16800	23400	13500
24	13600	11500	33700	38100	41100	40700	31000	18800	14700	18500	25600	12800
25	13600	17500	32700	43600	38800	39000	34900	18600	14200	20700	23900	12100
26	13600	16900	32300	50100	31100	39100	37700	21100	13500	20600	20100	10900
27	13600	12000	30200	59700	29000	42300	37400	20900	13100	18900	19100	10900
28	13600	17900	29200	67000	34600	46000	36900	21200	13000	18100	18900	11000
29	13600	22700	33100	70400	41400	49300	35500	25900	12900	17800	18900	10900
30	13600	27100	41500	66200	---	52100	33300	30400	14600	19400	18700	10900
31	13700	---	44600	57600	---	52100	---	32900	---	23900	17900	---
TOTAL	392800	429000	1371800	1249300	1092700	1569800	1135400	971100	540800	496000	902700	458400
MEAN	12670	14300	44250	40300	37680	50640	37850	31330	18030	16000	29120	15280
MAX	13800	27100	70800	70400	49200	78200	50500	52000	34200	23900	53400	18500
MIN	11200	11000	29200	23800	26100	29200	27100	18200	12900	13300	17900	10900
CFSM	.72	.81	2.51	2.29	2.14	2.88	2.15	1.78	1.02	.91	1.66	.87
IN.	.83	.91	2.90	2.64	2.31	3.32	2.40	2.05	1.14	1.05	1.91	.97
AC-FT	779100	850900	2721000	2478000	2167000	3114000	2252000	1926000	1073000	983800	1791000	909200

CAL YR 1983 TOTAL 10950500 MEAN 30000 MAX 83200 MIN 10700 CFSM 1.71 IN 23.15 AC-FT 21720000
WTR YR 1984 TOTAL 10609800 MEAN 28990 MAX 78200 MIN 10900 CFSM 1.65 IN 22.43 AC-FT 21040000

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02358754 APALACHICOLA RIVER NEAR WEWAHITCHKA, FL

LOCATION.--Lat 30°08'02", long 85°08'39", NE¼ sec.16, T.45, R.9 W., Gulf County, Hydrologic Unit 03130011, on right bank at George C. Gaskins State Park, 3.7 mi northeast of Wewahitchka and 44.2 mi upstream from mouth.

DRAINAGE AREA.--17,800 mi², approximately.

PERIOD OF RECORD.--January 1950 to February 1954, August 1955 to September 1980, October 1980 to current year. Prior to October 1979, discharge records are available in files of the Corps of Engineers, Mobile, Alabama District.

GAGE.--Water-stage recorder. Datum of gage is 12.136 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Water-stage recorder January 17, 1950, to February 8, 1954, and 3.405 ft August 2, 1955, to August 17, 1955, at site 200 ft downstream of present location at datum 3.405 ft higher. Water stage recorder August 17, 1955, to October 18, 1955, at site 200 ft downstream of present location at datum 1.278 ft higher. Water-stage recorder October 18, 1955, to August 30, 1979, at site 200 ft downstream at present datum. Since August 1979, at present site and datum.

COOPERATION.--Records from October 1957, to current year, were collected and computed by Corps of Engineers and were reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 137,000 ft³/s January 31, 1978, gage height 14.75 ft; minimum 4,590 ft³/s, gage height -1.56 ft November 5, 1981 (furnished).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1929, reached a stage of 19.20 ft (from flood profile by Corps of Engineers).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 72,000 ft³/s Mar. 9, gage height, 12.08 ft; minimum daily discharge, 10,600 ft³/s Nov. 19, gage height, 1.95 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11300	12300	24700	38200	58400	41600	45000	31200	32000	13900	29000	17900
2	11000	12400	27500	41100	52300	45000	38800	29400	31800	13900	32100	18100
3	10900	12400	29900	41100	47800	48000	39100	28700	25400	15200	36200	18200
4	11000	12300	31200	38100	46600	43200	45500	31900	22000	18200	42500	18300
5	11000	12300	31600	36300	45300	38600	47400	39000	21100	16000	48900	18400
6	11800	12400	32300	36800	43700	50200	44800	41700	22200	14500	52400	18300
7	12800	12500	33900	37100	40300	63400	40200	46400	21100	14100	45000	18200
8	12700	12500	37900	35400	36700	68000	38900	48500	20300	13900	38000	18000
9	11400	12500	43200	32000	33900	72000	38800	47400	18500	13900	35000	17800
10	11000	12400	48500	28300	32400	70000	40400	47300	18200	13900	32000	17400
11	11100	12300	53300	26300	32100	67000	39000	44300	18200	13900	29600	18200
12	11000	12400	57700	26700	31500	58200	36800	38900	17900	13900	25100	18200
13	11500	12500	59100	27900	30300	53400	35800	33500	16700	13900	22400	16800
14	13600	12500	63600	28900	31300	50800	33700	30400	15600	13800	20400	16500
15	13600	12600	66600	28200	34300	48200	33800	27700	15300	13800	19100	16300
16	13400	12700	64300	26700	35700	52600	32900	27300	15300	13900	21000	14900
17	13500	12000	58400	26700	36300	49100	30000	26800	15100	14100	20100	14600
18	13600	11200	54100	28300	37200	45900	30700	22900	15100	14300	20300	14600
19	12600	10600	50900	31000	38700	39900	30000	20200	15600	14300	18900	14600
20	12500	10700	46400	33900	39800	34500	28500	18900	15800	14300	21500	14400
21	12400	11000	43500	36900	40500	33900	28600	18500	15900	18600	22800	14400
22	12400	11100	42000	37600	39700	35400	27200	18200	15100	21700	22900	14200
23	12600	10900	39800	36500	38600	38700	25600	18500	15700	16900	22700	13900
24	12400	11200	37300	35700	38800	41000	29000	18500	15000	18300	24600	13200
25	12400	13700	34400	35800	39000	41000	32600	18400	14500	20600	23100	12500
26	12400	16900	32400	38300	37600	39800	35100	20900	13900	20900	20100	10800
27	12400	16000	31300	45300	34700	39900	34700	20700	13600	20900	18900	10800
28	12300	16200	30700	52700	32100	43500	34300	20900	13400	19600	18500	10900
29	12300	18900	30300	59900	38800	46300	33000	24800	13400	18900	18500	10900
30	12300	22100	30900	63600	---	48700	31100	28500	14900	22200	18500	10900
31	12300	---	33900	63200	---	48700	---	30800	---	26400	18100	---
TOTAL	377500	391500	1301600	1154500	1124400	1496500	1061300	921100	538600	513700	838200	462200
MEAN	12180	13050	41990	37240	38770	48270	35380	29710	17950	16540	27040	15410
MAX	13600	22100	66600	63600	58400	72000	47400	48500	32000	26400	52400	18400
MIN	10900	10600	24700	26300	30300	33900	25600	18200	13400	13800	18100	10800
CFSM	.68	.73	2.36	2.09	2.18	2.71	1.99	1.67	1.01	.93	1.52	.87
IN.	.79	.82	2.72	2.41	2.35	3.13	2.22	1.92	1.13	1.07	1.75	.97
AC-FT	748800	776500	2582000	2290000	2230000	2968000	2105000	1827000	1068000	1017000	1663000	916800

WTR YR 1984 TOTAL 10180100 MEAN 27810 MAX 72000 MIN 10600 CFSM 1.56 IN 21.28 AC-FT 20190000

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02359000 CHIPOLA RIVER NEAR ALTHA, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°32'02", long 85°09'55", in NW¼ sec.32, T.2 N., R.9 W., Calhoun County, Hydrologic Unit 03130012, near center of span on downstream side of bridge on State Highway 274, 0.9 mi downstream from Holliman Branch, 3.5 mi southwest of Altha, and 54 mi upstream from mouth.

DRAINAGE AREA.--781 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1912 to December 1913, September 1921 to September 1927, August 1929 to September 1931, March 1943 to current year. Monthly discharge only for some periods published in WSP 1304.

REVISED RECORDS.--WSP 1384: Drainage area. WSP 1504: 1924, 1925 (M), 1926.

GAGE.--Water-stage recorder. Datum of gage is 19.95 ft National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Jan. 13, 1950, and Mar. 13, 1978 to Mar. 20, 1979, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--49 years (water years 1922-27, 1930-31, 1944-84), 1,508 ft³/s, 26.22 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s Sept. 20, 1926, gage height, 33.55 ft, from flood marks, from rating curve extended above 12,800 ft³/s on basis of slope-area measurement of peak flow; minimum, 330 ft³/s Oct. 31, Nov. 1, 2, 1968; minimum gage height, 8.29 ft Nov. 13-15, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,380 ft³/s Mar. 7, gage height, 24.52 ft; minimum, 602 ft³/s Nov. 16-19, gage height, 8.85 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1110	652	1390	2290	3630	2800	3300	1830	1470	1340	2830	1190
2	1050	639	1350	2400	3480	2830	3240	1760	1540	1460	3120	1140
3	990	639	1440	2400	3290	2850	3410	1690	1540	1680	3150	1110
4	940	639	1420	2290	4200	2740	4550	1640	1520	1750	2900	1190
5	890	633	1330	2150	4390	2570	4380	1580	1470	1640	2650	1510
6	840	627	1830	1990	3720	5980	3880	1520	1410	1510	2510	1290
7	800	639	2060	1870	3220	7300	3630	1480	1360	1490	2450	1160
8	760	646	2080	1790	2930	7020	3560	1450	1320	1390	2290	1110
9	740	639	2080	1720	2740	6530	4230	1450	1270	1300	2020	1070
10	700	633	2150	1700	2570	6550	4500	1430	1220	1230	1830	1030
11	680	627	2480	1700	2480	6640	4290	1400	1160	1200	1730	1000
12	658	621	3080	1650	2400	6430	3940	1340	1130	1220	1770	984
13	829	621	3080	1610	2530	5880	3660	1310	1110	1240	1830	966
14	835	614	3000	1580	2650	4950	3490	1280	1080	1270	1810	956
15	817	616	3060	1560	2630	4180	3310	1270	1020	1250	1720	940
16	805	610	3220	1560	2610	3680	3080	1200	995	1260	1640	938
17	799	603	3270	1560	2650	3380	2850	1190	965	1250	1540	925
18	738	604	3190	1610	2670	3160	2670	1180	935	1300	1490	894
19	713	607	3010	2200	2590	3000	2530	1150	905	1440	1500	899
20	695	691	2760	2290	2410	2910	2420	1140	905	1530	1590	893
21	689	718	2500	2280	2270	2980	2310	1130	982	1590	1510	878
22	689	765	2300	2270	2300	3100	2230	1190	1220	1860	1350	868
23	726	780	2200	2330	2270	3270	2180	1160	1480	1940	1280	862
24	744	1290	2110	2510	2150	3480	2140	1180	1520	1730	1270	852
25	732	1540	2000	2600	2060	3670	2110	1220	1450	1470	1690	831
26	720	1480	1910	2640	1980	3680	2060	1240	1370	1410	1830	825
27	701	1410	1860	3320	2420	3640	2100	1270	1210	1330	1640	811
28	689	1450	1920	3770	2880	3690	2070	1340	1090	1310	1490	825
29	670	1480	2130	3770	2840	3530	2010	1360	1070	1520	1410	829
30	664	1480	2150	3720	---	3340	1920	1380	1150	2160	1320	825
31	658	---	2180	3690	---	3280	---	1410	---	2680	1250	---
TOTAL	24071	24993	70540	70820	80960	129040	92050	42170	36867	46750	58410	29601
MEAN	776	833	2275	2285	2792	4163	3068	1360	1229	1508	1884	987
MAX	1110	1540	3270	3770	4390	7300	4550	1830	1540	2680	3150	1510
MIN	658	603	1330	1560	1980	2570	1920	1130	905	1200	1250	811
CFSM	.99	1.07	2.91	2.93	3.58	5.33	3.93	1.74	1.57	1.93	2.41	1.26
IN.	1.15	1.19	3.36	3.37	3.86	6.15	4.38	2.01	1.76	2.23	2.78	1.41
AC-FT	47740	49570	139900	140500	160600	256000	182600	83640	73130	92730	115900	58710

CAL YR 1983 TOTAL 741312 MEAN 2031 MAX 6050 MIN 603 CFSM 2.60 IN 35.31 AC-FT 1470000
WTR YR 1984 TOTAL 706272 MEAN 1930 MAX 7300 MIN 603 CFSM 2.47 IN 33.64 AC-FT 1401000

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02359000 CHIPOLA RIVER NEAR ALTHA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1962 to June 1972, October 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
JAN												
05...	0900	2160	165	7.7	9.0	4.8	10.3	89	58	92	79	5
APR												
04...	1400	4710	122	7.6	17.0	27	7.6	80	>400	>670	54	3
JUN												
28...	1150	1100	--	8.1	24.5	3.8	7.4	89	27	K15	98	9
AUG												
20...	1100	1480	200	7.6	24.0	3.2	6.8	82	330	330	93	5

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
JAN												
05...	27	2.8	3.1	8	.2	.60	74	2.9	5.4	7.2	<.10	5.7
APR												
04...	18	2.2	2.0	7	.1	.70	51	2.5	.7	4.2	<.10	3.5
JUN												
28...	33	3.8	3.1	6	.1	.40	89	1.4	2.8	6.0	<.10	6.4
AUG												
20...	31	3.8	2.8	6	.1	.50	88	4.3	4.0	5.8	<.10	6.0

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
JAN												
05...	102	97	.14	595	.85	.070	.09	.50	.040	.12	.020	.040
APR												
04...	83	62	.11	1060	.46	.030	.04	.70	.030	.09	<.010	<.010
JUN												
28...	124	110	.17	368	1.0	.040	.05	.30	.060	--	.020	.010
AUG												
20...	132	110	.18	527	1.1	.050	.06	.60	.030	--	.010	<.010

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
JAN												
05...	.12	10	1	17	<.5	<1	<1	<3	1	62	3	<4
APR												
04...	--	60	1	13	<1.0	<1	<1	<3	<1	130	1	<4
JUN												
28...	.03	20	1	15	<.0	<1	<1	<3	4	54	3	<4
AUG												
20...	--	10	1	16	<.0	1	1	<3	4	85	3	<4

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN												
05...	5	<.1	<10	<1	<1	<1	29	<6	16	7	41	43
APR												
04...	10	<.1	<10	<1	<1	<1	22	<6	8	29	369	59
JUN												
28...	6	<.1	<10	<1	<1	<1	39	<6	6	13	39	62
AUG												
20...	6	.1	<10	1	<1	<1	37	<6	5	16	64	69

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02359035 FOURMILE CREEK AT CLARKSVILLE, FL

LOCATION.--Lat 30°26'41", long 85°10'59", in NW¼ sec.31, T.1 N., R.9 W., Calhoun County, Hydrologic Unit 03130012, near left bank on downstream side of bridge on State Highway 73, 0.6 mi north of Clarksville, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--36.0 mi².

PERIOD OF RECORD.--January 1980 to current year (gage heights and discharge measurements only).

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 36.88 ft National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1180 ft³/s Mar. 7, 1984, gage height, 9.94 ft; minimum measured, 25 ft³/s Oct. 23, 1981, gage height, 0.78 ft.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM-FLOW, INSTAN-TANEOUS (CFS)
NOV			
15...	0910	1.36	45
JAN			
09...	1350	1.89	71
MAR			
02...	0940	2.50	99
07...	1640	7.73	675
JUN			
20...	1225	1.64	51
AUG			
22...	0843	2.98	121

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02359101 CHIPOLA RIVER AT DEAD LAKE OUTLET NR WEWAHITCHKA, FL

LOCATION.--Lat 30°37'38", long 85°10'39", in NE¼ sec.19, T.4 S., R.9 W., Gulf County, Hydrologic Unit 03130012 on upstream side of bridge on county road 22A, 50 ft upstream from sheet pile wier, 1.7 mi northeast of Wewahitchka.

DRAINAGE AREA.--1205 mi².

PERIOD OF RECORD.--November 1979 to current year (gage heights and discharge measurements only), discontinued.

GAGE.--Water-stage recorder and sheet pile weir control. Datum of gage is 11.02 ft National Vertical Datum of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Indeterminate amount of flow from Apalachicola River enters Dead Lake during extreme high stages. Outflow from lake is controlled by four vertical lift gages installed July 5, 1974.

EXTREMES FOR PERIOD OF RECORD.--Maximum measured, 8,750 ft³/s, Mar. 18, 1980; maximum gage height, 23.38 ft Apr. 4, 1980; minimum measured, 526 ft³/s Oct. 7, 1982; minimum gage height, 14.07 ft Dec. 12, 1981.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16.04	15.16	18.57	19.95	21.35	20.28	20.87	19.60	18.69	18.35	20.30	18.37
2	15.92	15.13	18.70	20.10	21.21	20.35	20.83	19.52	18.79	18.56	20.43	18.29
3	15.83	15.09	18.84	20.20	21.05	20.43	21.09	19.42	18.88	18.73	20.67	18.23
4	15.77	15.06	19.04	20.18	21.05	20.51	22.21	19.35	18.88	18.85	20.83	18.20
5	15.69	15.06	19.15	20.09	21.16	20.55	22.46	19.28	18.76	18.88	20.86	18.28
6	15.62	15.03	19.26	20.01	21.24	21.13	22.13	19.31	18.58	18.78	20.84	18.39
7	15.53	15.05	19.44	19.98	21.08	22.46	21.74	19.45	18.45	18.64	20.80	18.42
8	15.46	15.08	19.71	19.89	20.79	22.67	21.38	19.63	18.35	18.53	20.70	18.36
9	15.40	15.08	19.98	19.72	20.47	22.55	21.32	19.82	18.27	18.47	20.56	18.29
10	15.35	15.08	20.21	19.48	20.19	22.35	21.42	19.95	18.19	18.40	20.37	18.21
11	15.32	15.07	20.55	19.27	19.99	22.20	21.41	20.01	18.10	18.33	20.17	18.14
12	15.30	15.04	20.98	19.11	19.84	22.11	21.31	20.04	18.05	18.30	19.96	18.07
13	15.40	15.03	21.24	19.07	19.81	22.01	21.15	19.99	18.02	18.29	19.69	18.00
14	15.46	15.00	21.36	19.07	19.80	21.85	20.95	19.85	17.93	18.29	19.38	17.92
15	15.56	15.01	21.40	19.06	19.89	21.64	20.76	19.65	17.95	18.28	19.08	17.84
16	15.63	15.02	21.39	18.99	19.98	21.41	20.57	19.42	17.97	18.28	18.84	17.76
17	15.65	15.00	21.30	18.93	20.03	21.17	20.41	19.19	17.95	18.32	18.71	17.67
18	15.65	14.97	21.18	18.95	20.06	20.95	20.22	19.00	17.91	18.48	18.60	17.56
19	15.63	14.94	21.05	19.17	20.11	20.70	20.05	18.82	17.85	18.73	18.53	17.46
20	15.59	15.07	20.89	19.47	20.15	20.44	19.91	18.61	17.77	18.86	18.49	17.36
21	15.54	15.20	20.71	19.77	20.16	20.24	19.77	18.45	17.71	18.87	18.57	17.27
22	15.48	15.30	20.54	19.95	20.15	20.17	19.63	18.39	17.78	18.90	18.72	17.19
23	15.43	15.37	20.38	20.01	20.13	20.23	19.54	18.40	18.01	18.98	18.82	17.11
24	15.40	15.82	20.24	20.04	20.11	20.34	19.42	18.34	18.25	18.97	18.87	17.04
25	15.37	16.62	20.03	20.07	20.10	20.48	19.34	18.32	18.41	18.90	18.84	16.96
26	15.35	17.49	19.83	20.18	20.03	20.55	19.35	18.30	18.42	18.79	18.86	16.89
27	15.32	17.97	19.66	20.49	20.07	20.67	19.42	18.32	18.36	18.68	18.85	16.82
28	15.28	18.25	19.62	20.88	20.17	20.78	19.53	18.37	18.27	18.55	18.78	16.76
29	15.25	18.36	19.68	21.21	20.23	20.86	19.60	18.47	18.19	18.52	18.66	16.69
30	15.22	18.46	19.71	21.39	---	20.89	19.62	18.57	18.21	19.14	18.55	16.65
31	15.19	---	19.80	21.42	---	20.88	---	18.61	---	19.98	18.46	---
TOTAL	480.63	469.81	624.44	616.10	590.40	653.85	617.41	592.45	546.95	578.63	603.79	530.20
MEAN	15.50	15.66	20.14	19.87	20.36	21.09	20.58	19.11	18.23	18.67	19.48	17.67
MAX	16.04	18.46	21.40	21.42	21.35	22.67	22.46	20.04	18.88	19.98	20.86	18.42
MIN	15.19	14.94	18.57	18.93	19.80	20.17	19.34	18.30	17.71	18.28	18.46	16.65

CAL YR 1983 TOTAL 6856.94 MEAN 18.79 MAX 22.09 MIN 14.94
WTR YR 1984 TOTAL 6904.66 MEAN 18.87 MAX 22.67 MIN 14.94

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM-FLOW, INSTAN-TANEOUS (CFS)
OCT				JAN			
07...	1005	15.54	858	10...	1145	19.48	4980
NOV							
15...	1340	15.01	730				

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02359170 APALACHICOLA RIVER NEAR SUMATRA, FL

LOCATION.--Lat 29°56'57", Long 85°00'56", in SW¼ sec.14, T.6 S., R.8 W., Franklin County, Hydrologic Unit 03130011, on left bank at Brickyard Landing, 2.4 mi west of Fort Gadsden, 5.3 mi southwest of Sumatra, and 20.6 mi upstream from mouth.

DRAINAGE AREA.--19,200 mi² approximately.

PERIOD OF RECORD.--September 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark).

REMARKS.--Records good, except those below 15,000 ft³/s which are tide affected and rated fair.

AVERAGE DISCHARGE.--7 years, 29,440 ft³/s (20.82 in/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 172,000 ft³/s Feb. 2, 1978, gage height, 12.92 ft estimated from Corps of Engineers flood profile, extended above 103,000 ft³/s; minimum daily, 5,800 ft³/s Nov. 4, 5, 1981, estimated; minimum recorded gage height, 1.11 ft Dec. 5, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 85,600 ft³/s Mar. 11, gage height, 9.71 ft; minimum daily, 11,300 ft³/s, Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14200	14600	31700	43000	68600	43100	52300	42900	33800	19800	41500	27400
2	13400	14600	34100	45200	66500	44200	53600	42500	35900	21900	41400	26400
3	13000	14600	36600	47200	61600	46000	55400	41900	37700	23100	42300	25800
4	13300	14700	39000	47800	56800	47900	61100	41100	38600	24600	43800	25800
5	13400	14800	40500	47200	53300	49700	63400	40400	37700	26500	46500	26400
6	12800	14900	41800	46200	51600	51600	65500	40200	35400	27000	49700	26500
7	12600	14800	42100	45800	50300	53000	65000	41700	33100	25500	52800	26700
8	13600	15200	42900	45800	48400	59900	61800	43900	31700	23300	54900	26700
9	14000	15800	44600	45200	46300	73600	60000	46300	30600	21300	54900	26200
10	13000	15400	47200	43700	44200	83100	56800	48400	29000	20100	53100	25700
11	12800	15400	50900	41100	42600	85300	53600	49700	27200	19600	50600	25300
12	13100	14600	56400	38600	41700	84500	52200	50300	26100	19600	48400	25100
13	13800	14200	60700	37600	41900	82700	51400	50200	25400	19600	45600	25100
14	13000	14500	64700	37900	41300	78300	50000	48500	24600	19500	42200	24300
15	14300	15600	69200	38400	40900	72700	48500	46300	23300	19100	38700	23200
16	15500	15000	73300	38100	42100	67000	46900	43700	22000	19100	35400	22200
17	15600	14100	73600	37900	43300	61800	45800	41100	20900	19200	32900	20500
18	15600	13000	70100	37900	43900	56900	44800	39400	20100	21300	31700	18800
19	15700	12600	65400	38700	44600	52700	43500	37900	19500	23500	31100	18000
20	15600	14900	60900	40000	45300	49700	42600	35700	19500	23900	30500	18000
21	15700	14400	56200	42100	46000	46600	41800	33000	19700	24200	30100	17900
22	15400	13500	52700	44100	46600	44200	41100	30500	20900	26100	30800	17800
23	15000	13400	50600	45200	46600	43900	40800	28600	21600	29400	31800	17600
24	15500	15000	48800	45600	46300	45100	39900	27500	21800	30500	32600	17000
25	15600	16500	47000	45300	46200	46900	39000	27300	21700	30000	33300	15800
26	15000	21000	45200	45300	46000	47600	38700	27200	21200	30200	34100	14800
27	14500	24500	43500	47300	46900	49300	39600	27200	20100	31300	34100	12600
28	14300	26300	43500	49400	46200	49300	41100	28000	18800	31900	32600	11300
29	14300	27600	43700	53300	43900	49100	42300	29100	18200	30900	30900	11400
30	14500	29400	42600	60000	---	49600	42900	30800	17800	36300	29600	11600
31	14500	---	41900	66000	---	50600	---	32000	---	42100	28500	---
TOTAL	442600	494900	1561400	1386900	1389900	1765900	1481400	1193300	773900	780400	1216400	631900
MEAN	14280	16500	50370	44740	47930	56960	49380	38490	25800	25170	39240	21060
MAX	15700	29400	73600	66000	68600	85300	65500	50300	38600	42100	54900	27400
MIN	12600	12600	31700	37600	40900	43100	38700	27200	17800	19100	28500	11300
CFSM	.74	.86	2.62	2.33	2.50	2.97	2.57	2.01	1.34	1.31	2.04	1.10
IN.	.86	.96	3.03	2.69	2.69	3.42	2.87	2.31	1.50	1.51	2.36	1.22
AC-FT	877900	981600	3097000	2751000	2757000	3503000	2938000	2367000	1535000	1548000	2413000	1253000

CAL YR 1983	TOTAL	12979600	MEAN	35560	MAX	88200	MIN	12600	CFSM 1.85	IN 25.15	AC-FT	25750000
WTR YR 1984	TOTAL	13118900	MEAN	35840	MAX	85300	MIN	11300	CFSM 1.87	IN 25.42	AC-FT	26020000

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Figure 8. Location of stream gaging stations in the Econfina Creek, Choctawhatchee River, Lafayette Creek, Alaqua Creek, and Turkey Creek basins.

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02359500 ECONFINA CREEK NEAR BENNETT, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°23'04", long 85°33'24", in SE¼ sec.20, T.1 S., R.13 W., Bay County, Hydrologic Unit 03140101, near center of span on downstream side of bridge on State Highway 388, 0.5 mi downstream from Old Mill Branch, 1.6 mi southwest of Bennett, and 11 mi upstream from mouth.

DRAINAGE AREA.--122 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for October and November 1936, published in WSP 1304.

REVISED RECORDS.--WSP 872: 1937. WSP 1906: Drainage area. WRD FL-80-4: 1979.

GAGE.--Water-stage recorder. Datum of gage is 1.03 ft National Geodetic Vertical Datum of 1929. Prior to Jan. 29, 1962, nonrecording gage and Jan. 30, 1962 to June 16, 1966, water-stage recorder at site 150 ft downstream at present datum. June 17, 1966 to Sept. 28, 1966, nonrecording gage at present site and datum.

REMARKS.--Records good. Flow includes large ground-water inflow.

AVERAGE DISCHARGE.--49 years, 534 ft³/s, 59.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,860 ft³/s Apr. 2, 1948, gage height, 12.46 ft observed, from rating curve extended above 2,200 ft³/s; minimum, 307 ft³/s Jan. 9, 1956, gage height, 4.10 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since September 1926, 15.0 ft present datum, from floodmark, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar. 6	1000	1940*	10.55*	July 22	0600	1040	8.03
Apr. 4	0100	1860	10.00	Aug. 1	0900	1290	8.73
Apr. 10	1800	1090	8.19				

Minimum, 437 ft³/s Nov. 7, gage height, 5.73 ft.

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02359500 ECONFINA CREEK NEAR BENNETT, FL--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	448	442	503	576	589	612	628	596	516	759	1260	581
2	447	441	490	555	577	585	618	606	508	772	1100	573
3	446	440	486	543	602	572	1020	604	502	829	1090	611
4	451	439	490	535	887	563	1650	596	498	900	917	650
5	453	441	511	531	936	593	1400	583	493	829	780	644
6	448	440	714	526	778	1650	1070	576	488	810	726	652
7	444	445	797	521	658	1570	833	569	486	712	698	599
8	442	457	669	515	623	1360	762	564	490	697	673	574
9	441	457	566	511	605	940	944	567	494	651	654	563
10	441	451	535	522	594	802	1080	573	488	618	641	554
11	451	448	615	535	585	742	995	560	485	634	632	549
12	471	445	845	525	579	713	826	550	518	676	651	552
13	555	443	875	513	687	729	761	544	574	651	678	544
14	629	442	741	507	746	727	731	539	611	662	651	560
15	536	446	678	503	676	694	712	535	661	678	624	570
16	484	446	612	507	612	668	695	528	611	630	617	544
17	468	443	574	521	589	654	686	523	584	686	626	533
18	464	441	559	551	576	643	697	520	538	895	624	529
19	459	441	561	736	568	634	679	517	523	963	627	526
20	454	494	553	755	562	713	665	515	540	859	687	524
21	451	555	540	640	566	872	654	514	589	847	786	522
22	451	507	537	570	604	860	645	534	545	1020	756	520
23	452	474	536	552	608	727	652	628	689	902	674	517
24	537	579	531	625	581	668	645	607	779	758	676	513
25	529	709	524	692	560	652	631	558	674	726	658	510
26	479	662	522	687	550	640	620	540	603	671	661	507
27	462	551	523	821	721	822	626	540	550	691	697	505
28	454	549	546	887	763	829	643	576	560	682	700	503
29	448	571	612	786	680	748	620	562	579	726	631	503
30	445	534	719	654	---	683	605	553	679	955	605	502
31	443	---	632	610	---	646	---	531	---	1120	591	---
TOTAL	14583	14633	18596	18512	18662	24311	23793	17308	16855	24009	22391	16534
MEAN	470	488	600	597	644	784	793	558	562	774	722	551
MAX	629	709	875	887	936	1650	1650	628	779	1120	1260	652
MIN	441	439	486	503	550	563	605	514	485	618	591	502
CFSM	3.85	4.00	4.92	4.89	5.28	6.43	6.50	4.57	4.61	6.34	5.92	4.52
IN.	4.45	4.46	5.67	5.64	5.69	7.41	7.25	5.28	5.14	7.32	6.83	5.04
AC-FT	28930	29020	36890	36720	37020	48220	47190	34330	33430	47620	44410	32800

CAL YR 1983 TOTAL 208865 MEAN 572 MAX 1170 MIN 432 CFSM 4.69 IN 63.69 AC-FT 414300
WTR YR 1984 TOTAL 230187 MEAN 629 MAX 1650 MIN 439 CFSM 5.16 IN 70.19 AC-FT 456600

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ECONFINA CREEK BASIN

02359500 ECONFINA CREEK NEAR BENNETT, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1961 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L AS CACO3)
JAN 04...	0930	536	89	7.7	15.0	1.4	8.4	83	29	42	43	2
APR 03...	1600	1310	52	7.1	17.0	22	4.0	42	>400	>670	22	2
JUN 27...	1250	545	93	7.8	22.5	.80	6.2	72	80	85	43	4
AUG 20...	1415	672	76	--	23.0	2.0	6.2	73	130	140	37	3

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
JAN 04...	14	2.0	1.5	7	.1	.20	41	1.6	3.2	2.8	<.10	4.5
APR 03...	7.3	.97	1.2	10	.1	.20	20	3.1	1.2	2.6	<.10	2.5
JUN 27...	14	2.0	1.4	7	.0	.30	39	1.2	2.5	2.8	<.10	4.5
AUG 20...	12	1.6	1.3	7	.0	.20	34	--	4.2	5.8	<.10	4.4

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
JAN 04...	54	53	.07	78	<.10	.020	.03	.20	.020	.06	.020	<.010
APR 03...	46	28	.06	163	<.10	.010	.01	.90	.020	.06	<.010	.020
JUN 27...	60	51	.08	88	.11	.050	.06	.30	<.010	--	<.010	<.010
AUG 20...	52	50	.07	94	.11	<.010	--	.80	.010	--	<.010	<.010

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
JAN 04...	--	20	1	13	<.5	<1	<1	<3	1	24	3	<4
APR 03...	.06	110	1	8	<1.0	<1	<1	<3	<1	93	2	<4
JUN 27...	--	50	1	10	<.0	<1	<1	<3	3	48	1	<4
AUG 20...	--	50	<1	9	<.0	<1	<1	<3	1	85	2	5

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN 04...	2	<.1	<10	<1	<1	<1	34	<6	3	14	20	21
APR 03...	7	<.1	<10	<1	<1	<1	23	<6	<3	52	184	42
JUN 27...	2	<.1	<10	1	<1	1	36	<6	9	13	19	69
AUG 20...	3	<.1	<10	1	<1	<1	29	<6	4	21	18	14

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02365435 WRIGHTS CREEK NEAR BONIFAY, FL

LOCATION.--Lat 30°51'56", long 85°41'41", in SW¼ sec.1, T.5 N, R.15 W., Holmes County, Hydrologic Unit 03140203, on left bank on downstream side of bridge on State Highway 177, 2.5 mi upstream from Tenmile Creek, 4.9 mi North of Bonifay, and 14.5 mi upstream from mouth.

DRAINAGE AREA.--72.4 mi².

PERIOD OF RECORD.--June 1966, May 1967, and November 1979 to current year (discharge measurements only.)

GAGE.--Nonrecording gage and crest-stage gage. Altitude of gage is 100 ft, from topographic map.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5470 ft³/s, revised, Feb. 3, 1982, gage height, 16.18 ft, from rating curve extended above 2140 ft³/s; minimum measured, 11 ft³/s Oct. 19, 1981, gage height, 2.35 ft.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)
OCT				
04...	1135	2.50	16	21.0
JAN				
13...	1145	5.29	178	13.0
MAR				
01...	1435	5.92	248	--
07...	1405	11.82	2140	--
JUN				
21...	1000	2.62	16	--
AUG				
20...	0910	2.92	28	--

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02365500 CHOCTAWHATCHEE RIVER AT CARYVILLE, FL

LOCATION.--Lat 30°46'32", long 85°49'40", in NW¼ sec.10, T.6 N., R.16 W., Holmes County, Hydrologic Unit 03140203, near right bank on downstream side of bridge on U.S. Highway 90, 300 ft downstream from Louisville and Nashville Railroad bridge, 0.8 mi west of Caryville, 1.8 mi downstream from Wrights Creek, and 64 mi upstream from mouth.

DRAINAGE AREA.--3,499 mi².

PERIOD OF RECORD.--August 1929 to current year. Gage-height records collected at same site from 1928 to August 1929 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 39.02 ft National Geodetic Vertical Datum of 1929. Aug. 17 to Oct. 11, 1929, nonrecording gage at same site and datum; Oct. 12, 1929 to Sept. 11, 1951, water-stage recorder at same site and datum; Sept 12, 1951 to Aug. 11, 1976, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--55 years, 5,503 ft³/s, 21.35 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 88,000 ft³/s Apr. 13, 1975, gage height, 18.39 ft; minimum, 604 ft³/s Sept. 15,16, 1968; minimum gage height, -0.82 ft Sept. 6, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1850 (from information furnished by Corps of Engineers, Mobile District) 27.1 ft Mar. 17, 1929, from National Weather Service records and floodmarks; discharge, 206,000 ft³/s from rating curve extended above 85,000 ft³/s on basis of slope-area determination of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,700 ft³/s Mar. 9, gage height, 13.57 ft; minimum, 1,120 ft³/s Sept. 30, gage height, 1.37 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1890	1540	7590	11500	9720	16200	8490	4540	5220	1670	3360	2070
2	1690	1530	6960	11100	8070	16300	7030	4390	4140	1990	4220	1960
3	1700	1510	5960	9670	7110	13000	6540	4260	3350	2080	6310	1830
4	1680	1500	5150	8320	6540	9680	7400	4230	2900	2160	8460	1730
5	1650	1490	4980	7340	6400	8210	9610	5890	2600	2290	9910	1840
6	1620	1490	5770	6380	6450	11600	11500	8830	2380	2340	10100	2140
7	1590	1540	6830	5700	6250	20600	11700	12100	2210	2010	9060	2070
8	1560	1580	7620	5250	5890	24400	10300	12300	2090	1850	7320	1860
9	1520	1650	7830	4910	5560	26900	8680	9190	2000	1760	5340	1680
10	1490	1710	7000	4700	5290	25700	8560	6570	1910	1750	3910	1590
11	1520	1680	6170	5010	5150	22400	9490	5250	1830	1700	3190	1530
12	1600	1630	8460	5960	4990	18700	9960	4330	1770	1890	2970	1470
13	1740	1590	12900	6400	5430	15100	9190	3760	1780	2140	3160	1420
14	2130	1570	15200	6140	6880	12000	8020	3400	2060	2180	3340	1380
15	2590	1570	15500	5730	9340	9690	7050	3160	2240	2200	3290	1360
16	2610	1630	13600	5470	10500	8310	6350	2990	1990	2420	3440	1370
17	2240	1770	10800	5750	9480	7440	5870	2900	1960	2560	3430	1360
18	2080	1830	8350	6340	8110	6830	5390	2770	1970	2560	3030	1300
19	1970	1810	7040	6670	6980	6420	5010	2620	1910	2900	2670	1270
20	1880	2150	6510	7620	6340	6490	4730	2490	1800	4010	2420	1240
21	1810	3880	6070	8860	5870	10700	4620	2380	1730	4730	2200	1210
22	1740	5200	5630	9280	5560	17400	4540	2320	1710	4200	2030	1200
23	1740	5290	5460	8630	5440	18400	4500	3110	1770	3510	1980	1180
24	1760	4900	5420	7580	5350	17400	5460	4690	2010	3060	2230	1200
25	1840	5010	5200	7910	5280	13800	7300	4950	1910	2690	3060	1190
26	1930	5800	4850	9950	5060	10400	8390	4400	1760	2460	3910	1180
27	1790	6070	4610	13200	5490	9000	7600	4450	1640	2230	3620	1170
28	1730	5840	4640	15900	7800	12000	6350	4940	1550	2040	2990	1150
29	1660	6280	6080	16300	12100	12900	5550	5180	1480	2060	2610	1130
30	1610	7200	8410	14500	---	12600	4950	5390	1480	2930	2400	1120
31	1570	---	10500	12100	---	10700	---	5690	---	3410	2220	---
TOTAL	55930	88240	237090	260170	198430	431270	220130	153470	65150	77780	128180	44200
MEAN	1804	2941	7648	8393	6842	13910	7338	4951	2172	2509	4135	1473
MAX	2610	7200	15500	16300	12100	26900	11700	12300	5220	4730	10100	2140
MIN	1490	1490	4610	4700	4990	6420	4500	2320	1480	1670	1980	1120
CFSM	.52	.84	2.19	2.40	1.96	3.98	2.10	1.42	.62	.72	1.18	.42
IN.	.59	.94	2.52	2.77	2.11	4.59	2.34	1.63	.69	.83	1.36	.47
AC-FT	110900	175000	470300	516000	393600	855400	436600	304400	129200	154300	254200	87670

CAL YR 1983	TOTAL	2490010	MEAN	6822	MAX	26200	MIN	1490	CFSM 1.95	IN 26.47	AC-FT	4939000
WTR YR 1984	TOTAL	1960040	MEAN	5355	MAX	26900	MIN	1120	CFSM 1.53	IN 20.84	AC-FT	3888000

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02365700 SANDY CREEK AT PONCE DE LEON, FL

LOCATION.--Lat 30°43'38", long 85°56'12", in SE¼ sec.28, T.4 N., R.17 W., Holmes County, Hydrologic Unit 03140203, at left bank on downstream side of abandoned bridge on old State Highway 81 in Ponce de Leon, 0.1 mi upstream from Blue Creek, 0.4 mi upstream from Mill Creek, and 10 mi upstream from mouth.

DRAINAGE AREA.--80.7 mi², approximately.

PERIOD OF RECORD.--January 1961 to current year (annual maximum and discharge measurements).

REVISED RECORDS.--WDR FL-76-4: drainage area.

GAGE.--Nonrecording gage and crest-stage gage. Datum of gage is 42.94 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Prior to October 1975, records included flow of Blue and Mill Creek.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (1962-75), 11,200 ft³/s July 31, 1975, gage height, 15.23 ft, includes that of Blue and Mill Creeks; Maximum discharge (1976-84), 5,890 ft³/s Feb. 24, 1979, gage height, 13.89 ft; minimum measured, 5.6 ft³/s Oct. 20, 1981, gage height, 1.05 ft.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of March 1929, reached a stage of about 17 ft present datum, discharge not determined.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM-FLOW, INSTAN-TANEOUS (CFS)
OCT				MAY			
05...	1142	1.89	65	09...	1430	2.64	90
JAN				JUN			
12...	1540	3.08	133	21...	1140	2.28	61
MAR				AUG			
01...	0947	3.84	141	20...	1315	2.36	66

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02366000 HOLMES CREEK AT VERNON, FL

LOCATION.--Lat 30°37'35", long 85°42'45", in NE¼ sec.35, T.3 N., R.15 W., Washington County, Hydrologic Unit 03140203, near left bank on downstream side of bridge on State Highway 79 at Vernon, 0.2 mi downstream from Pippin Mill Creek, and 25 mi upstream from mouth.

DRAINAGE AREA.--386 mi².

PERIOD OF RECORD.--April 1950 to May 1979; June 1979 to June 1981 (fragmentary); July 1981 to current year (discharge measurements only).

REVISED RECORDS.--WSP 1384: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 10.70 ft National Geodetic Vertical Datum of 1929.

AVERAGE DISCHARGE.--28 years (water years 1951-78), 677 ft³/s, 23.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,900 ft³/s Apr. 4, 1960, gage height, 23.35 ft, from graph based on gage readings; minimum, 234 ft³/s July 8, 1955 and Oct. 21, 1981; minimum gage height observed, 10.15 ft Nov. 1, 2, 1968.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)
OCT				
04...	0947	10.81	361	--
NOV				
18...	1150	10.75	322	--
JAN				
12...	0955	12.69	573	--
MAR				
01...	1745	15.55	2040	17.0
MAR				
07...	1415	18.80	6090	--
JUN				
26...	1028	11.34	426	21.5
AUG				
20...	1720	11.79	486	--

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02366500 CHOCTAWHATCHEE RIVER NEAR BRUCE, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°27'03", long 85°53'54", in NE¼ sec.36, T.1 N., R.17 W., Walton County, Hydrologic Unit 03140203, near center of main channel on upstream side of bridge on State Highway 20, 4.0 mi southeast of Bruce, 5.8 mi downstream from Holmes Creek, and 21 mi upstream from mouth.

DRAINAGE AREA.--4,384 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to March 1983; Apr. 1983 to May 1984 (discharge measurements only); June to September 1984.

REVISED RECORDS.--WSP 872: 1937. WSP 1384: Drainage area. WSP 1504: 1931-34.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Apr. 1, 1983, water-stage recorder at same site at datum 3.94 ft lower. Prior to Apr. 6, 1934, nonrecording gage at site 1.0 mi downstream at datum 4.19 ft lower.

REMARKS.--Records good.

AVERAGE DISCHARGE.--52 years (1931-82), 7,144 ft³/s, 22.13 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 79,900 ft³/s Apr. 15, 1975, gage height, 21.48 ft at present datum; minimum, 1,290 ft³/s Oct. 27, 1968, gage height, 3.46 ft at present datum.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of March 1929 reached a stage of 25.0 ft at former site and datum, from floodmarks, discharge, 220,000 ft³/s, from rating curve extended above 80,000 ft³/s corrected, on basis of records for station at Caryville (02365500).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge during period June to September, 11,200 ft³/s Aug. 9, gage height observed, 11.48 ft; minimum daily, 1,940 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									5740	2650	5030	3600
2									5920	2790	5600	3250
3									5960	3150	6100	3130
4									5900	3540	6640	3130
5									4860	3460	7450	3080
6									4080	3540	8630	2970
7									3630	3670	10100	3020
8									3300	3670	11000	3070
9									3040	3410	11200	2950
10									2940	3120	10600	2760
11									2830	2940	9390	2610
12									2720	2900	7770	2510
13									2740	3010	6200	2430
14									2750	3100	5080	2410
15									3030	3150	4630	2370
16									3310	3130	4470	2320
17									3200	3270	4380	2290
18									3140	3640	4410	2230
19									3040	3930	4350	2190
20									2890	4030	4180	2150
21									2790	4290	3930	2150
22									2720	4600	3560	2180
23									2620	5210	3320	2170
24									2750	5510	3160	2110
25									2880	5060	3120	2030
26									2820	4490	3420	2030
27									2660	4080	3800	2020
28									2570	3780	4200	1970
29									2510	3930	4430	1950
30									2550	4340	4240	1940
31									---	4620	3920	---
TOTAL									101890	116010	178310	75020
MEAN									3396	3742	5752	2501
MAX									5960	5510	11200	3600
MIN									2510	2650	3120	1940
CFSM									.78	.85	1.31	.57
IN.									.86	.98	1.51	.64
AC-FT									202100	230100	353700	148800

NOTE.--Gage removed Mar. 30, 1983, for construction of new bridge; reestablished May 18, 1984.

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02366500 CHOCTAWHATCHEE RIVER NEAR BRUCE, FL--Continued.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
JAN												
04...	1550	9670	54	7.0	5.5	24	11.0	87	230	490	19	2
APR												
05...	1830	9590	60	7.3	17.0	14	8.3	87	87	75	24	7
JUN												
27...	1800	2670	128	7.8	28.0	15	6.5	83	27	K15	56	5
AUG												
22...	1110	3580	110	--	26.5	4.0	6.1	76	K18	K100	50	3

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
JAN												
04...	5.8	1.1	2.4	20	.2	1.2	17	3.3	6.0	4.9	<.10	5.8
APR												
05...	7.5	1.3	2.1	15	.2	.80	17	1.6	1.6	4.4	<.10	4.4
JUN												
27...	18	2.7	3.9	13	.2	.90	51	1.6	3.2	5.7	<.10	6.6
AUG												
22...	16	2.4	3.6	13	.2	.80	47	--	4.2	5.5	<.10	7.3

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
JAN												
04...	44	38	.06	1150	.17	.030	.04	.40	.060	.18	.020	<.010
APR												
05...	35	33	.05	906	.16	<.010	--	1.0	.020	.06	.010	<.010
JUN												
27...	89	72	.12	642	.32	--	--	.40	.040	--	--	<.010
AUG												
22...	73	69	.10	706	.26	.030	.04	.40	.020	--	<.010	<.010

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
JAN												
04...	<10	<1	18	<.5	<1	<1	<3	1	80	1	<4	16
APR												
05...	40	1	18	<1.0	<1	<1	<3	1	260	<1	<4	29
JUN												
27...	10	1	19	1.0	<1	<1	<3	2	51	1	<4	37
AUG												
22...	130	1	21	<.0	<1	1	<3	<1	490	2	<4	33

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN											
04...	<.1	<10	<1	<1	<1	16	<6	4	13	339	54
APR											
05...	<.1	<10	1	<1	<1	21	<6	4	11	285	73
JUN											
27...	<.1	<10	1	<1	1	45	<6	6	20	144	85
AUG											
22...	<.1	<10	3	<1	1	41	<6	<3	17	164	71

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02366900 MAGNOLIA CREEK NEAR FREEPORT, FL

LOCATION.--Lat 30°31'48", long 86°05'15", in NW¼ sec.6, T.1 S., R.18 W., Walton County, Hydrologic Unit 03140102, near right bank on downstream side of bridge, 0.5 mi upstream from Lafayette Creek, and 3.5 mi northeast of Freeport.

DRAINAGE AREA.--11.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1968 to September 1971 and October 1974 to September 1978; October 1971 to September 1974 and October 1978 to current year (gage heights, discharge measurements and average discharge).

REVISED RECORDS.--WRD FL-77-4: 1969-71, 1975-76 (M).

GAGE.--Water-stage recorder. Datum of gage is 18.31 ft National Geodetic Vertical Datum of 1929.

AVERAGE DISCHARGE.--13 years (water years 1969-71, 1974-84), 39.1 ft³/s, 47.43 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft³/s Feb. 16, 1970, gage height, 13.62 ft, from rating curve extended above 350 ft³/s on basis of velocity-area study; minimum, 14 ft³/s June 29, 30, July 1, 1974, gage height, 4.63 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1968 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JUN 21...	1145	24	58	6.4	23.5	15	8.3	15	11	3.3	1.6
SEP 10...	1245	28	66	6.1	22.0	7	8.1	16	12	3.7	1.7

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
JUN 21...	1.1	11	.1	3.1	4.0	3.1	5.4	6.1	<.10	3.0	49
SEP 10...	1.2	11	.1	3.3	4.0	6.2	5.4	6.1	<.10	3.1	52

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)
JUN 21...	26	.07	3.2	--	<.010	1.5	.020	.28	.30	1.8	8.0
SEP 10...	27	.07	3.9	2.0	.010	2.0	.010	.59	.60	2.6	12

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUN 21...	<.010	<.010	12	<1	<1.0	<1.00	<.1	<.1	<.1	<1.0
SEP 10...	<.010	<.010	12	--	--	--	--	--	--	--

DATE	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUN 21...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<10
SEP 10...	--	--	--	--	--	--	--	--	--	--

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02366911 LAFAYETTE CREEK AT FREEPORT, FL

LOCATION.--Lat 30°29'35", long 86°07'33", Walton County, Hydrologic Unit 03140102, at bridge on State Highway 20 at Freeport.

DRAINAGE AREA.--35.5 mi².

PERIOD OF RECORD.--May 1969 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JUN 21...	1330	108	43	6.3	27.0	60	8.1	12	7	2.8	1.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
JUN 21...	1.3	16	.2	2.2	5.0	4.9	3.5	5.5	<.10	3.1	46

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)
JUN 21...	23	.06	13	<.010	.90	.110	.29	.40	1.3	5.8

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUN 21...	.020	<.010	12	<1	<1.0	<1.00	<.1	<.1	<.1	<1.0

DATE	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUN 21...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<10

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02367006 ALAQUA CREEK NEAR PORTLAND, FL

LOCATION.--Lat 30°33'22", long 86°10'45", in NE¼ sec.30, T.1 N., R.19 W., Walton County, Hydrologic Unit 03140102, near center on downstream side of bridge on State Highway S-282, 3.2 mi northeast of Portland, and 5.8 mi upstream from mouth.

DRAINAGE AREA.--83.7 mi².

PERIOD OF RECORD.--May and July 1977, October 1978 to January 1980 (discharge measurements only), February 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage 1.84 ft National Geodetic Vertical Datum of 1929 (Vitro Corporation of America bench mark). Prior to Feb. 14, 1980, nonrecording gage at same site and datum.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,870 ft³/s Feb. 3, 1982, gage height, 12.38 ft, extended above 655 ft³/s; minimum discharge, 52 ft³/s July 17, 1981, Oct. 17, 1981, and part of each day Oct. 16, 18, 1982, gage height, 2.90 ft.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 913 ft³/s Mar. 7, gage height, 9.96 ft; minimum, 63 ft³/s, Sept. 30, gage height, 3.14 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	155	217	280	228	281	208	165	93	152	226	105
2	121	150	200	256	222	252	202	161	91	170	503	100
3	119	144	195	242	222	236	431	161	88	170	600	98
4	119	141	208	231	312	222	787	164	86	120	348	96
5	123	152	219	225	265	257	785	153	85	101	297	99
6	119	146	402	219	220	774	592	148	82	132	224	93
7	113	143	558	213	206	814	406	143	81	119	175	86
8	110	167	333	205	202	605	337	135	80	106	152	83
9	111	155	244	200	198	414	459	129	80	108	137	81
10	115	147	222	234	195	338	562	123	78	91	152	79
11	157	141	329	286	192	307	420	119	82	84	282	78
12	197	136	721	224	190	286	334	117	83	95	192	78
13	318	133	709	207	366	299	304	115	107	98	229	77
14	292	133	484	199	416	299	282	112	103	93	220	93
15	179	137	355	194	262	259	268	110	93	97	169	93
16	150	157	295	223	221	242	247	106	97	98	137	83
17	137	142	266	285	218	234	237	101	118	110	125	81
18	132	133	257	249	205	226	228	100	98	206	241	75
19	127	130	281	387	196	221	218	100	88	190	207	73
20	122	280	252	395	193	386	215	100	85	164	164	73
21	118	461	234	266	211	685	208	108	94	112	134	71
22	124	332	228	231	297	598	200	115	108	97	121	70
23	319	202	240	221	240	360	264	122	111	98	132	70
24	687	276	229	262	204	292	333	118	165	140	188	69
25	529	371	213	320	189	271	222	123	109	119	157	67
26	254	266	207	311	179	255	195	135	88	99	189	66
27	206	208	210	471	432	262	187	135	80	87	202	64
28	184	348	303	497	645	284	186	117	80	149	152	64
29	173	431	484	335	427	256	176	126	82	235	123	64
30	165	270	547	267	---	225	165	110	146	384	115	63
31	158	---	367	243	---	215	---	98	---	269	110	---
TOTAL	5902	6187	10009	8378	7553	10655	9658	3869	2861	4293	6403	2392
MEAN	190	206	323	270	260	344	322	125	95.4	138	207	79.7
MAX	687	461	721	497	645	814	787	165	165	384	600	105
MIN	110	130	195	194	179	215	165	98	78	84	110	63
AC-FT	11710	12270	19850	16620	14980	21130	19160	7670	5670	8520	12700	4740

CAL YR 1983 TOTAL 104988 MEAN 288 MAX 1370 MIN 95 AC-FT 208200
WTR YR 1984 TOTAL 78160 MEAN 214 MAX 814 MIN 63 AC-FT 155000

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02367310 JUNIPER CREEK AT STATE HIGHWAY 85, NEAR NICEVILLE, FL

LOCATION.--Lat 30°33'26", long 86°31'11", in NW¼ sec.26, T.1 N., R.23 W., Okaloosa County, Hydrologic Unit 03140102, on left bank 20 ft downstream from southbound bridge on State Highway 85, 0.8 mi upstream from Turkey Creek, and 3.0 mi northwest of Niceville.

DRAINAGE AREA.--27.6 mi².

PERIOD OF RECORD.--March 1966 to September 1975; October 1975 to April 1977 (discharge measurements only); May 1977 to current year.

REVISED RECORDS.--WDR FL-77-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7.78 ft National Geodetic Vertical Datum of 1929. March 1966 to September 1975, water-stage recorder at site 40 ft upstream at present datum. October 1975 to April 1977, nonrecording gage at site 40 ft upstream at present datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--16 years, (water years 1967-75, 1978-84), 91.6 ft³/s, 45.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft³/s Sept. 23, 1975, gage height, 9.56 ft, extended above 415 ft³/s; minimum, 39 ft³/s July 28, 1967; minimum gage height, 5.19 ft Sept. 11, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 23	1400	*625	*8.32	May 6	0200	339	7.71
Dec. 11	1900	404	7.84	Apr. 3	1500	511	8.03

Minimum discharge, 58 ft³/s Sept. 30; gage height, 6.09 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	98	90	99	89	89	84	96	84	89	141	69
2	91	96	89	98	89	88	84	96	83	83	149	68
3	91	96	90	96	93	87	325	97	82	90	107	68
4	92	98	96	96	98	85	246	96	81	88	91	68
5	94	117	110	96	90	133	133	95	80	96	87	68
6	102	97	133	95	88	223	116	95	81	97	82	66
7	91	97	96	94	88	111	109	94	80	84	80	65
8	90	97	93	94	88	102	111	92	80	82	82	65
9	90	96	91	93	88	99	151	90	80	77	80	64
10	92	95	90	98	87	98	113	89	79	74	78	64
11	107	93	246	101	87	97	108	89	77	73	76	65
12	106	92	162	105	88	96	106	88	78	131	93	65
13	130	92	118	95	114	100	105	89	82	103	87	65
14	96	92	126	94	91	96	104	88	80	92	77	68
15	92	95	110	94	88	93	103	87	83	129	76	66
16	90	92	106	102	90	92	102	85	80	128	74	64
17	89	89	104	98	89	91	102	85	80	101	73	63
18	89	89	103	100	86	91	101	85	80	110	83	63
19	88	90	102	121	85	90	101	85	77	97	81	62
20	87	156	100	96	84	113	101	86	80	85	75	62
21	87	107	99	93	99	96	101	92	92	80	75	61
22	87	96	103	91	94	90	103	108	86	85	72	61
23	415	94	101	91	86	89	118	116	92	82	80	62
24	151	114	97	102	84	89	101	98	98	89	89	61
25	120	106	96	100	83	89	98	90	79	78	75	61
26	111	94	96	101	82	88	98	89	75	74	79	60
27	106	93	97	106	157	93	99	88	74	73	96	61
28	103	111	132	95	102	90	98	89	78	80	76	60
29	101	95	150	91	91	87	96	94	97	122	72	60
30	99	92	107	89	---	85	96	86	138	110	71	60
31	98	---	101	89	---	85	---	84	---	89	70	---
TOTAL	3376	2969	3434	3013	2678	3055	3513	2841	2516	2871	2627	1915
MEAN	109	99.0	111	97.2	92.3	98.5	117	91.6	83.9	92.6	84.7	63.8
MAX	415	156	246	121	157	223	325	116	138	131	149	69
MIN	87	89	89	89	82	85	84	84	74	73	70	60
CFSM	3.95	3.59	4.02	3.52	3.34	3.57	4.24	3.32	3.04	3.36	3.07	2.31
IN.	4.55	4.00	4.63	4.06	3.61	4.12	4.73	3.83	3.39	3.87	3.54	2.58
AC-FT	6700	5890	6810	5980	5310	6060	6970	5640	4990	5690	5210	3800

CAL YR 1983	TOTAL	43674	MEAN	120	MAX 415	MIN 84	CFSM 4.35	IN 58.86	AC-FT	86630
WTR YR 1984	TOTAL	34808	MEAN	95.1	MAX 415	MIN 60	CFSM 3.45	IN 46.91	AC-FT	69040

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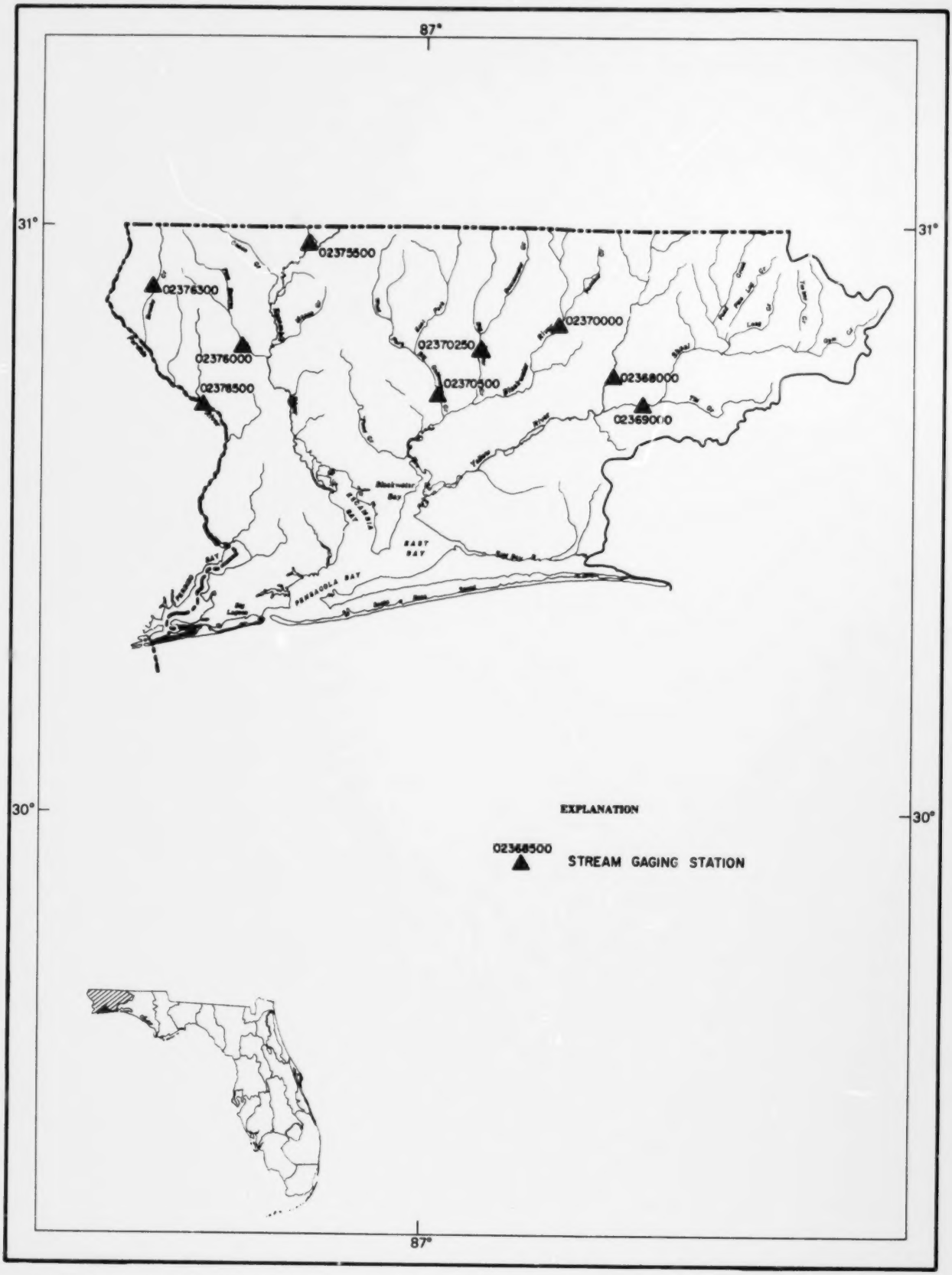

Figure 9. Location of stream gaging stations in the Yellow, Blackwater, Escambia and Perdido River basins.

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02368000 YELLOW RIVER AT MILLIGAN, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°45'10", long 86°37'45" in SE¼ sec.15, T.3 N., R.24 W., Okaloosa County, Hydrologic Unit 03140103, near center on downstream side of bridge on U.S. Highway 90, 0.5 mi east of Milligan, 0.5 mi upstream from Trammel Creek, 6.7 mi upstream from Shoal River, and 40 mi upstream from mouth.

DRAINAGE AREA.--624 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1938 to current year.

REVISED RECORDS.--WSP 892: 1938-39. WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 45.00 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 6, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--46 years, 1,169 ft³/s, 25.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,600 ft³/s Apr. 12, 1975, gage height, 17.71 ft; minimum, 131 ft³/s June 23, 24, 1967 (result of channel work); minimum gage height, 0.59 ft Oct. 21, 22, 24, 25, 30, 1968. Prior to June 23, 1967, minimum discharge, 143 ft³/s Oct. 25, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1929 reached a stage of 26.2 ft, from information by local residents, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,150 ft³/s Mar. 9, gage height, 10.34 ft; minimum, 292 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	393	338	1380	2820	1510	3470	1080	745	414	565	934	635
2	380	333	1280	2760	1330	3500	982	718	402	441	1530	557
3	372	329	955	1970	1250	2530	1480	721	397	453	2270	568
4	367	332	821	1400	1260	1610	2500	753	390	470	2600	520
5	363	346	892	1210	1240	1500	2180	1000	380	436	3370	515
6	355	338	1110	1110	1220	4100	1940	1300	385	390	3840	487
7	348	343	1140	1050	1190	6890	1970	1170	490	383	3210	465
8	346	354	1190	996	1110	7170	1800	882	463	385	2060	443
9	345	350	1170	946	1030	7920	1480	737	429	371	1310	424
10	352	348	1020	1110	982	6130	1550	668	463	424	954	405
11	403	345	1400	1360	959	4100	1700	627	492	373	855	393
12	424	343	2280	1530	957	2680	1720	596	460	405	962	421
13	464	341	2850	1650	1100	1990	1510	568	458	745	993	397
14	474	339	3250	1510	1260	1730	1260	542	468	737	1090	378
15	466	337	3430	1250	1500	1620	1110	586	460	663	1280	378
16	464	346	3150	1130	1670	1520	1020	1030	470	907	1190	492
17	439	387	2190	1120	1620	1420	954	841	492	1110	893	431
18	413	416	1480	1210	1300	1330	904	739	482	1200	742	448
19	395	414	1210	1430	1110	1260	860	742	446	1160	689	417
20	380	426	1100	1600	1030	1270	828	761	431	1400	637	390
21	368	538	1040	1740	1020	1320	804	763	443	1650	622	376
22	365	966	998	1730	1020	1480	790	676	520	1620	578	366
23	418	889	984	1500	990	1740	899	593	593	1010	563	361
24	414	832	984	1410	965	1740	1030	542	540	713	671	352
25	404	910	962	1730	934	1470	1200	510	515	614	769	342
26	406	1190	899	2380	888	1230	1400	485	507	560	940	333
27	386	1320	855	3210	1430	1150	1490	463	448	527	996	323
28	368	1320	984	3460	2460	1230	1040	448	412	512	971	314
29	357	1360	1320	3110	2940	1340	850	433	390	716	852	307
30	350	1370	1730	2390	---	1290	785	421	472	734	750	296
31	343	---	2340	1840	---	1190	---	417	---	708	718	---
TOTAL	12122	17800	46394	53662	37275	78920	39116	21477	13712	22382	39839	12534
MEAN	391	593	1497	1731	1285	2546	1304	693	457	722	1285	418
MAX	474	1370	3430	3460	2940	7920	2500	1300	593	1650	3840	635
MIN	343	329	821	946	888	1150	785	417	380	371	563	296
CFSM	.63	.95	2.40	2.77	2.06	4.08	2.09	1.11	.73	1.16	2.06	.67
IN.	.72	1.06	2.77	3.20	2.22	4.70	2.33	1.28	.82	1.33	2.38	.75
AC-FT	24040	35310	92020	106400	73930	156500	77590	42600	27200	44390	79020	24860

CAL YR 1983 TOTAL 517581 MEAN 1418 MAX 7400 MIN 329 CFSM 2.27 IN 30.86 AC-FT 1027000
WTR YR 1984 TOTAL 395233 MEAN 1080 MAX 7920 MIN 296 CFSM 1.73 IN 23.56 AC-FT 783900

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02368000 YELLOW RIVER AT MILLIGAN, FL.--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1962 to June 1972, October 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
APR												
06...	0810	1940	38	6.9	15.0	15	8.6	85	160	69	12	2
JUN												
26...	1000	510	63	7.6	27.0	7.6	7.4	94	92	K76	26	3
AUG												
21...	1820	620	57	6.4	26.5	5.0	7.0	88	110	80	25	2

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
APR												
06...	3.5	.84	1.7	22	.2	.60	10	2.4	1.6	3.4	<.10	4.2
JUN												
26...	7.8	1.5	2.2	15	.2	.60	23	1.1	2.0	3.5	<.10	5.7
AUG												
21...	7.4	1.5	2.2	16	.2	.50	23	18	3.3	3.8	<.10	6.4

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
APR												
06...	27	23	.04	141	.12	.490	.63	1.1	.020	.06	<.010	<.010
JUN												
26...	48	37	.07	66	.22	.070	.09	.90	.060	--	.020	<.010
AUG												
21...	50	40	.07	84	.20	.040	.05	.60	.030	--	<.010	<.010

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
APR												
06...	80	<1	14	<1.0	<1	<1	<3	1	200	<1	<4	16
JUN												
26...	10	1	17	<.0	<1	<1	<3	6	180	4	<4	24
AUG												
21...	70	1	20	<.0	<1	1	<3	<1	520	2	<4	32

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR											
06...	<.1	<10	<1	<1	<1	10	<6	8	25	131	44
JUN											
26...	<.1	<10	<1	<1	2	18	<6	11	11	15	64
AUG											
21...	<.1	<10	2	<1	1	18	<6	17	18	30	56

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02369000 SHOAL RIVER NEAR CRESTVIEW, FL

LOCATION.--Lat 30°41'50", long 86°34'15", in SW¼ sec.5, T.2 N., R.23 W., Okaloosa County, Hydrologic Unit 03140103, near center of bridge on downstream side of southbound lane on State Highway 85, 3.5 mi downstream from Titi Creek, 4.2 mi south of Crestview, and 7 mi upstream from mouth.

DRAINAGE AREA.--474 mi².

PERIOD OF RECORD.--July 1938 to current year.

REVISED RECORDS.--WSP 1274: 1939-40, 1944, 1947, 1950. WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 47.21 ft National Geodetic Vertical Datum of 1929. Prior to Feb. 12, 1939 and June 12, 1972 to Aug. 22, 1973, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--46 years, 1,095 ft³/s, 31.37 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,200 ft³/s Aug. 1, 1975, gage height, 15.58 ft; minimum, 240 ft³/s Oct. 17, 18, 1972; minimum gage height, 0.96 ft May 13,14, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
Dec. 13	2300	5250	8.07	Mar. 8	0500	*9570	9.97
Feb. 29	1730	3850	7.47	Apr. 5	0900	4300	7.65

Minimum daily discharge, 432 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	595	537	865	1220	998	2350	873	753	573	765	1060	758
2	582	531	770	1060	956	1260	849	735	541	756	1810	705
3	571	523	737	1000	938	1080	1190	711	520	782	3090	839
4	558	525	784	965	1080	1010	3340	749	502	610	2920	835
5	567	571	868	935	1180	1010	4240	721	486	576	2300	728
6	550	539	1010	906	1030	2920	3260	686	471	642	3200	673
7	529	525	1310	882	938	6980	1670	664	459	586	2570	628
8	520	537	1180	856	902	8940	1250	642	467	698	1320	593
9	518	543	924	837	880	5810	1320	621	486	737	1000	571
10	529	533	821	953	865	3180	1760	599	463	578	887	556
11	615	520	1090	1370	858	1860	1640	584	442	510	832	552
12	705	510	3530	1270	851	1550	1280	573	440	556	926	619
13	796	504	4850	1040	995	1430	1140	563	818	791	1050	567
14	962	510	4630	941	1430	1430	1060	550	1150	707	1240	546
15	818	535	2240	894	1380	1320	1010	550	861	552	1070	554
16	668	584	1400	938	1100	1220	965	531	702	737	904	639
17	624	569	1180	1060	1030	1150	924	508	686	892	849	563
18	604	531	1060	1090	986	1100	899	498	621	877	779	518
19	588	518	1030	1320	935	1060	880	496	578	956	924	500
20	567	777	1010	1750	885	1080	868	494	552	1230	861	496
21	554	1420	962	1390	887	1470	861	525	535	1010	758	484
22	550	1510	944	1090	1030	1840	837	662	576	705	705	473
23	735	941	1010	998	1030	1430	882	932	593	639	695	471
24	1020	894	1000	1060	938	1150	977	763	693	662	897	463
25	929	1240	921	1600	868	1050	911	633	597	633	1140	450
26	702	1200	870	1930	837	1010	823	619	490	595	1230	442
27	628	906	858	1760	1060	974	787	711	442	591	1410	436
28	593	965	1020	1710	2280	986	784	897	434	777	1270	438
29	569	1240	1650	1430	3610	1030	772	1010	438	956	1000	438
30	556	1110	2240	1190	---	968	742	794	504	1210	875	432
31	546	---	1740	1060	---	902	---	635	---	1190	823	---
TOTAL	19848	22348	44504	36525	32757	60550	38794	20409	17120	23506	40395	16967
MEAN	640	745	1436	1178	1130	1953	1293	658	571	758	1303	566
MAX	1020	1510	4850	1930	3610	8940	4240	1010	1150	1230	3200	839
MIN	518	504	737	837	837	902	742	494	434	510	695	432
CFSM	1.35	1.57	3.03	2.49	2.38	4.12	2.73	1.39	1.21	1.60	2.75	1.19
IN.	1.56	1.75	3.49	2.87	2.57	4.75	3.04	1.60	1.34	1.84	3.17	1.33
AC-FT	39370	44330	88270	72450	64970	120100	76950	40480	33960	46620	80120	33650

CAL YR 1983 TOTAL 495547 MEAN 1358 MAX 6490 MIN 504 CFSM 2.87 IN 38.89 AC-FT 982900
WTR YR 1984 TOTAL 373723 MEAN 1021 MAX 8940 MIN 432 CFSM 2.15 IN 29.33 AC-FT 741300

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02370000 BLACKWATER RIVER NEAR BAKER, FL

LOCATION.--Lat 30°50'00", long 86°44'05", in SW¼ sec.22, T.4 N., R.25 W., Okaloosa County, Blackwater River State Forest, Hydrologic unit 03140104, near right bank on downstream side of bridge on State Highway 4, 0.3 mi downstream from Red Wash Branch, 3.8 mi northwest of Baker, and 35 mi upstream from mouth.

DRAINAGE AREA.--205 mi².

PERIOD OF RECORD.--March 1950 to current year.

REVISED RECORDS.--WSP 1704: 1950 (M), 1951-52.

GAGE.--Water-stage recorder. Datum of gage is 60.5 ft National Geodetic Vertical Datum of 1929 (from design datum of bridge curb furnished by Florida Department of Transportation).

REMARKS.--Records good.

AVERAGE DISCHARGE.--34 years, 343 ft³/s, 22.71 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,200 ft³/s June 4, 1970, gage height, 25.61 ft; minimum, 60 ft³/s Sept. 7, 8, 1954; minimum gage height, 1.77 ft July 18-20, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	0300	2470	10.04	Mar. 6	1600	*6190	*15.92
Jan. 25	2100	1640	7.91	Apr. 3	1900	2230	9.46
Feb. 27	1800	2230	9.45				

Minimum daily discharge, 97 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	109	368	649	442	586	220	188	181	157	471	177
2	144	107	297	530	410	475	214	182	161	131	477	166
3	142	107	265	464	393	414	1240	186	147	224	986	157
4	140	109	310	416	436	363	1400	222	139	278	927	188
5	137	115	363	379	412	937	807	238	135	162	826	258
6	134	116	374	349	358	5280	555	220	132	140	724	264
7	130	113	442	331	327	4540	429	192	126	190	579	214
8	129	112	382	314	314	2770	355	173	126	210	558	177
9	129	115	318	300	300	1430	651	164	124	188	473	155
10	132	112	280	464	291	983	671	157	121	152	366	144
11	157	110	1130	689	284	776	516	150	121	126	337	140
12	157	110	2380	525	280	646	423	147	119	155	509	152
13	161	110	1810	438	425	586	358	142	126	388	537	157
14	154	112	996	377	484	534	323	139	129	401	447	144
15	144	123	721	341	390	475	299	147	127	247	393	154
16	137	139	570	347	327	429	276	135	126	240	329	267
17	132	134	475	358	302	399	262	134	130	314	286	164
18	126	124	416	368	282	371	249	134	145	314	258	137
19	123	119	377	596	267	351	238	135	142	347	245	126
20	121	335	345	572	258	371	229	135	127	320	227	123
21	118	436	331	475	262	423	222	134	126	287	220	118
22	116	291	325	407	278	368	222	184	130	215	208	113
23	129	219	353	355	269	325	318	341	177	179	224	112
24	130	339	339	894	254	300	325	310	236	159	308	109
25	124	663	310	1600	240	289	265	264	224	139	245	107
26	119	471	289	1520	227	274	224	217	145	135	247	103
27	118	341	284	1200	1590	269	208	202	134	124	224	102
28	115	638	558	917	1470	274	202	276	132	137	242	100
29	113	698	1300	713	851	265	197	377	121	150	222	99
30	112	491	1300	577	---	244	198	295	149	245	224	97
31	110	---	907	495	---	229	---	217	---	347	193	---
TOTAL	4080	7178	18915	17960	12423	25976	12096	6137	4258	6801	12512	4526
MEAN	132	239	610	579	428	838	403	198	142	219	404	151
MAX	161	698	2380	1600	1590	5280	1400	377	236	401	986	267
MIN	110	107	265	300	227	229	197	134	119	124	193	97
CFSM	.64	1.17	2.98	2.82	2.09	4.09	1.97	.97	.69	1.07	1.97	.74
IN.	.74	1.30	3.43	3.26	2.25	4.71	2.19	1.11	.77	1.23	2.27	.82
AC-FT	8090	14240	37520	35620	24640	51520	23990	12170	8450	13490	24820	8980

CAL YR 1983 TOTAL 177617 MEAN 487 MAX 3760 MIN 107 CFSM 2.38 IN 32.23 AC-FT 352300
WTR YR 1984 TOTAL 132862 MEAN 363 MAX 5280 MIN 97 CFSM 1.77 IN 24.11 AC-FT 263500

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02370250 BIG JUNIPER CREEK NEAR SPRING HILL, FL

LOCATION.--Lat 30°47'06", long 86°53'28", in NE¼ sec.12, T.3 N., R.27 W., Santa Rosa County, Hydrologic Unit 03140104, near center of channel on upstream side of bridge, 2.5 mi downstream from Sweetwater Creek, 3.2 mi east of Spring Hill, 8.3 mi above mouth, and 8.7 mi northwest of Harold.

DRAINAGE AREA.--113 mi².

PERIOD OF RECORD.--February 1980 to current year (discharge measurements only).

GAGE.--Nonrecording gage and crest-stage gage. Altitude of gage is 33 ft, from topographic map.

EXTREMES FOR PERIOD OF RECORD.--Maximum measured, 838 ft³/s July 30, 1982, gage height, 4.26 ft; minimum measured, 70 ft³/s July 9, 1981, gage height, 0.90 ft.

DISCHARGE MEASUREMENTS, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)	DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	STREAM-FLOW, INSTAN-TANEOUS (CFS)	TEMPER-ATURE (DEG C)
OCT					MAY				
11...	1615	1.97	186	--	01...	1545	1.82	156	--
NOV					JUN				
17...	1415	1.52	125	13.5	28...	1645	1.93	173	--
JAN					AUG				
13...	1005	2.47	264	9.5	22...	1655	1.84	156	--

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02370500 BIG COLDWATER CREEK NEAR MILTON, FL

LOCATION.--Lat 30°42'30", long 86°58'20", in SW¼ sec.5, T.2 N., R.27 W., Santa Rosa County, Hydrologic Unit 03140104, near right bank on downstream side of bridge on State Highway 191, 3 mi upstream from mouth, and 6.5 mi northeast of Milton.

DRAINAGE AREA.--237 mi².

PERIOD OF RECORD.--October 1938 to June 1979, October 1979 to September 1980 (gage heights and discharge measurements only), October 1980 to current year. Monthly discharge only for some periods, published in WSP 1304. Prior to October 1956, published as Coldwater Creek near Milton. October 1956 to September 1957, published as Big Coldwater River near Milton.

REVISED RECORDS.--WSP 892: 1939. WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 9.10 ft National Geodetic Vertical Datum of 1929. Prior to Dec. 2, 1938, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--44 years (water years 1938-78, 1981-84), 540 ft³/s 30.94 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,000 ft³/s June 4, 1970, gage height, 21.41 ft, from flood mark; minimum, 156 ft³/s June 10, 11, 1956; minimum gage height, 0.94 ft Dec. 11, 1938.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,700 ft³/s and maximum (*);

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	1700	6620	10.80	Apr. 4	1400	5140	9.94
Mar. 7	0500	*7880	*11.46	Aug. 3	1600	4200	9.30

Minimum discharge, 273 ft³/s Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	297	295	400	729	619	1110	455	425	356	480	938	402
2	295	293	372	637	576	703	447	417	334	354	2380	437
3	295	295	362	584	547	593	1610	435	319	341	3920	400
4	297	299	422	550	559	550	4640	450	307	336	2600	547
5	303	324	480	523	709	525	2680	425	299	344	1980	584
6	303	336	485	504	690	4450	1200	407	293	341	1590	515
7	299	307	668	483	564	6490	849	395	285	324	1030	425
8	295	303	523	467	515	2290	766	382	285	395	780	382
9	295	303	440	452	491	1210	943	375	285	344	649	364
10	301	301	402	616	483	986	949	364	283	314	578	354
11	344	295	1690	766	480	863	786	354	279	293	567	349
12	362	291	5730	625	475	793	690	346	285	440	686	346
13	346	291	3290	534	480	763	640	341	536	1150	661	339
14	334	301	1270	523	655	729	610	339	390	759	619	324
15	317	334	953	491	709	677	573	341	322	504	649	367
16	310	362	770	467	578	640	534	336	305	480	576	420
17	303	334	665	491	512	613	512	324	305	504	501	407
18	303	312	605	520	491	587	499	319	297	634	467	354
19	301	305	576	539	475	570	485	314	322	1130	455	331
20	297	671	547	763	457	671	483	317	341	1190	440	324
21	295	927	520	793	450	930	480	380	346	658	470	314
22	299	531	520	625	470	753	491	729	341	473	478	303
23	341	425	593	539	499	622	712	1630	319	405	450	301
24	329	534	550	501	480	564	690	1620	397	407	622	297
25	307	759	493	1010	452	545	542	668	372	440	665	291
26	303	547	457	2050	435	525	485	536	305	417	616	287
27	297	445	450	2080	417	520	470	517	289	405	607	283
28	293	542	877	1360	1450	525	457	905	344	367	599	281
29	291	564	1570	1070	2050	501	450	693	334	528	531	279
30	293	455	1510	843	---	475	435	485	523	819	460	277
31	293	---	960	699	---	462	---	400	---	905	422	---
TOTAL	9538	12281	29150	22834	17768	32235	25563	15969	9998	16481	27986	10884
MEAN	308	409	940	737	613	1040	852	515	333	532	903	363
MAX	362	927	5730	2080	2050	6490	4640	1630	536	1190	3920	584
MIN	291	291	362	452	417	462	435	314	279	293	422	277
CFSM	1.30	1.73	3.97	3.11	2.59	4.39	3.60	2.17	1.41	2.25	3.81	1.53
IN.	1.50	1.93	4.58	3.58	2.79	5.06	4.01	2.51	1.57	2.59	4.39	1.71
AC-FT	18920	24360	57820	45290	35240	63940	50700	31670	19830	32690	55510	21590

CAL YR 1983 TOTAL 250393 MEAN 686 MAX 6040 MIN 291 CFSM 2.90 IN 39.30 AC-FT 496700
WTR YR 1984 TOTAL 230687 MEAN 630 MAX 6490 MIN 277 CFSM 2.66 IN 36.21 AC-FT 457600

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02375500 ESCAMBIA RIVER NEAR CENTURY, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°57'54", long 87°14'03", in NW¼ sec.10, T.5 N., R.30 W., Santa Rosa County, Hydrologic Unit 03140305, on left bank 16 ft downstream from bridge on State Highway 4, 1.2 mi downstream from Escambia Creek, 1.7 mi east of Century, and 52 mi upstream from mouth.

DRAINAGE AREA.--3,817 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.-- WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 28.34 ft National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Jan. 13, 1940, nonrecording gage at same site and datum.

REMARKS.--Records fair. Some gage-height fluctuation during periods of low flow are attributed to regulation by power plants at Point-A Dam, 85.4 mi and Gnatt Dam, 90.1 mi upstream from the gaging station. Due to lagging intakes, nonrecording gage was used in conjunction with recording gage to determine mean gage heights.

AVERAGE DISCHARGE.--50 years, 6,359 ft³/s, 22.62 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92,300 ft³/s Apr. 12, 1975, gage height, 23.32 ft; minimum, 578 ft³/s Oct. 23, 1968; minimum gage height, 1.30 ft Sept. 15, Oct. 20, 21, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1850, 37.8 ft, March 1929, present datum, discharge not determined, from information by Corps of Engineers, Mobile District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37,000 ft³/s May 24, gage height, 18.20 ft; minimum, 1,260 ft³/s Sept. 30, gage height, 3.39 ft, observed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2080	1450	7980	17800	7550	19700	8790	5940	4200	2050	3930	2680
2	1860	1440	7020	15900	7200	18900	7280	5730	3920	2310	10400	2380
3	1770	1410	6130	13200	6570	16500	8790	5080	3670	2640	23200	2250
4	1950	1410	6350	11300	6790	13400	14000	6900	3380	2390	29500	2160
5	1930	1430	7620	9750	6650	11900	15000	17200	3140	2120	25800	2400
6	1760	1530	7450	8060	5890	16800	14000	21700	2940	1990	20700	2230
7	1680	1500	7660	6840	5660	22000	12500	16800	2720	2040	16200	2030
8	1540	1550	7590	5920	5240	25500	10600	9360	2530	2430	11800	1900
9	1770	1450	6450	5290	5290	25400	10800	6450	2440	2720	8570	1790
10	1680	1520	5660	5730	5440	22500	12900	5870	2400	2550	6000	1720
11	1730	1480	7760	8370	5390	20600	12800	5420	2260	2210	5170	1680
12	1690	1530	16800	9070	5320	17000	11000	4910	2170	2120	5320	1840
13	2120	1470	16500	8290	5830	14000	8880	4390	2290	2910	6210	1890
14	2320	1480	13600	7140	7020	11300	7480	3960	2430	3150	6870	1720
15	2570	1520	11100	6510	8220	8790	6450	3760	2600	3670	6210	1790
16	2140	1610	9320	6500	8930	7270	5730	3780	2300	4350	5720	1670
17	1810	1730	8060	7480	7200	6480	5290	3310	2260	5290	5300	1780
18	1740	1680	7200	7900	5470	5960	4840	3100	2700	4590	4800	1740
19	1630	1650	6600	9130	5830	5610	4620	2660	2870	5600	4310	1670
20	1920	2360	6010	11000	5830	6900	4510	2330	2340	6660	3700	1670
21	2580	3710	5450	11700	5760	10200	4230	3460	2350	4870	3290	1580
22	2050	4790	5080	11500	5450	10600	4230	14000	2230	3430	3150	1500
23	1810	4040	4790	10300	4910	8980	4990	33100	2070	2800	2780	1440
24	1740	4790	4790	10800	4000	7690	6250	36100	2300	2500	2870	1420
25	1800	7690	5040	15100	3500	7410	5330	20000	3220	2330	3010	1380
26	1770	8720	4950	17500	3810	10900	5120	9870	2720	2240	2950	1330
27	1790	7550	4790	17700	5980	14300	4710	6150	2290	2200	3490	1340
28	1580	7080	6350	16500	13100	15200	4000	6100	2170	2010	3800	1330
29	1510	8630	13500	14500	17900	15100	3960	6050	2000	2180	3640	1330
30	1490	8720	17400	11300	---	12800	5290	5310	2050	2970	3190	1260
31	1480	---	18700	9230	---	10400	---	4750	---	4190	2870	---
TOTAL	57290	96920	263700	327310	191730	420090	234370	283540	78960	95510	244750	52900
MEAN	1848	3231	8506	10560	6611	13550	7812	9146	2632	3081	7895	1763
MAX	2580	8720	18700	17800	17900	25500	15000	36100	4200	6660	29500	2680
MIN	1480	1410	4790	5290	3500	5610	3960	2330	2000	1990	2790	1260
CFSM	.48	.85	2.23	2.77	1.73	3.55	2.05	2.40	.69	.81	2.07	.46
IN.	.56	.94	2.57	3.19	1.87	4.09	2.28	2.76	.77	.93	2.39	.52
AC-FT	113600	192200	523000	649200	380300	833200	464900	562400	156600	189400	485500	104900

CAL YR 1983 TOTAL 3394750 MEAN 9301 MAX 44600 MIN 1410 CFSM 2.44 IN 33.08 AC-FT 6733000
WTR YR 1984 TOTAL 2347070 MEAN 6413 MAX 36100 MIN 1260 CFSM 1.68 IN 22.87 AC-FT 4655000

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02375500 ESCAMBIA RIVER NEAR CENTURY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1952 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
DEC												
06...	0930	7450	65	7.3	16.0	25	8.2	84	>400	>570	19	2
FEB												
15...	1300	8220	73	7.4	13.0	25	9.7	92	380	450	23	4
APR												
06...	1440	14000	55	7.2	17.0	20	8.6	89	130	130	18	2
MAY												
17...	1005	3310	99	7.4	22.5	15	6.9	79	K24	<1	30	2
AUG												
21...	1122	3290	101	7.1	23.5	13	6.7	79	70	K32	29	2

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
DEC												
06...	6.3	.86	3.6	27	.4	1.2	17	1.6	6.2	5.8	<.10	7.1
FEB												
15...	7.5	.93	3.7	26	.4	.70	19	1.5	4.4	5.4	<.10	7.1
APR												
06...	5.8	.78	3.0	26	.3	.90	16	2.0	3.9	4.1	<.10	6.4
MAY												
17...	10	1.1	5.7	29	.5	.90	28	2.2	5.7	7.8	<.10	7.5
AUG												
21...	9.8	1.0	6.2	31	.5	1.0	27	4.2	9.4	7.5	<.10	8.3

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC												
06...	51	41	.07	1030	<.10	<.010	--	.50	.040	.12	.010	<.010
FEB												
15...	48	41	.07	1070	.20	.030	.04	.40	.040	.12	<.010	<.010
APR												
06...	35	35	.05	1320	.13	.080	.10	.50	.010	.03	<.010	<.010
MAY												
17...	70	56	.10	626	.27	.040	.05	2.0	.030	.09	<.010	<.010
AUG												
21...	84	60	.11	746	.21	.040	.05	.50	.020	--	<.010	.010

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
DEC												
06...	--	10	1	30	<.5	<1	<1	<3	1	63	1	<4
FEB												
15...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
06...	--	40	1	21	<1.0	<1	<1	<3	1	99	1	<4
MAY												
17...	--	10	<1	29	<1.0	<1	<1	<3	2	73	<1	6
AUG												
21...	.03	40	1	29	<.0	1	1	<3	2	430	3	<4

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02375500 ESCAMBIA RIVER NEAR CENTURY, FL--Continued

WATER-QUALITY RECORDS

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC												
06...	16	<.1	<10	1	<1	<1	23	<6	5	57	1150	42
FEB												
15...	--	--	--	--	--	--	--	--	--	67	1490	52
APR												
06...	9	<.1	<10	1	<1	<1	24	<6	8	52	1970	48
MAY												
17...	49	<.1	<10	2	<1	<1	38	<6	8	26	232	73
AUG												
21...	47	<.1	<10	3	<1	1	3[illegible]	<6	4	23	204	70

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02376000 PINE BARREN CREEK NEAR BARTH, FL

LOCATION.--Lat 30°47'55", long 87°22'05", in SW¼ sec.5, T.3 N., R.31 W., Escambia County, Hydrologic Unit 03140305, near right bank 10 ft downstream from Wiggins Bridge on private road, 0.3 mi upstream from Blue Water Creek, 4.0 mi northwest of Barth, and 7.3 mi upstream from mouth.

DRAINAGE AREA.--75.3 mi².

PERIOD OF RECORD.--October 1952 to current year.

REVISED RECORDS.--WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 29.86 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Records good.

AVERAGE DISCHARGE.--32 years, 159 ft³/s, 28.67 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,800 ft³/s, Apr. 14, 1955, from rating extended above 2,100 ft³/s on basis of a slope-area measurement of peak flow; gage height, 18.0 ft from floodmark, minimum, 51 ft³/s June 8, 9, 1956; minimum gage height, 3.13 ft Sept. 3, 4, 1956; Oct. 20, 21, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft³/s and maximum(*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 12	0500	*3760	13.53	Mar. 21	2100	756	8.75
Dec. 29	1600	1090	10.18	Apr. 4	1400	1940	12.23
Jan. 24	1300	812	9.14	May 23	0700	1580	11.57
Feb. 28	1000	1200	10.54	Aug. 2	1600	2190	12.54
Mar. 7	1300	3500	13.40				

Minimum daily discharge, 87 ft³/s Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	94	121	160	134	202	141	115	112	103	404	101
2	91	95	112	148	139	171	140	116	106	100	1630	100
3	91	99	112	142	165	153	140	117	103	95	1610	100
4	93	103	190	144	236	147	1080	155	101	98	537	106
5	92	120	187	142	168	143	1140	121	99	95	260	110
6	91	101	183	138	139	336	299	114	99	106	320	100
7	89	97	168	133	132	2090	185	111	100	116	168	97
8	91	96	131	124	129	874	161	114	96	176	136	95
9	92	97	125	123	127	329	153	118	95	112	124	94
10	98	96	120	242	128	218	267	107	95	97	117	95
11	118	95	1320	364	127	187	249	104	96	92	117	112
12	109	95	2080	216	129	176	167	103	94	104	154	107
13	180	95	508	147	205	169	152	101	120	127	150	97
14	142	96	256	143	156	180	144	100	103	99	160	93
15	105	108	210	138	134	173	140	99	100	96	188	95
16	100	120	168	158	132	161	134	96	100	132	134	99
17	98	101	154	154	133	155	130	95	98	149	120	94
18	96	98	142	164	125	153	133	95	96	264	116	95
19	95	98	135	215	124	151	128	95	95	373	113	93
20	95	291	131	168	123	150	125	97	93	229	109	92
21	94	261	129	139	125	581	126	124	96	118	108	89
22	96	137	153	130	130	544	124	784	99	103	106	89
23	124	123	163	128	127	224	125	1310	93	96	104	91
24	110	267	135	489	120	179	149	326	104	98	120	91
25	100	324	124	503	118	164	124	163	95	117	242	90
26	98	157	123	351	116	166	118	152	90	101	211	88
27	95	136	128	246	474	159	116	127	88	95	134	88
28	95	213	331	192	848	159	119	129	89	101	121	87
29	94	183	804	160	233	156	120	218	89	122	111	87
30	93	135	462	144	---	148	118	150	127	123	109	87
31	93	---	200	136	---	142	---	120	---	108	104	---
TOTAL	3149	4131	9305	5981	5176	8940	6447	5776	2971	3945	8137	2862
MEAN	102	138	300	193	178	288	215	186	99.0	127	262	95.4
MAX	180	324	2080	503	848	2090	1140	1310	127	373	1630	112
MIN	89	94	112	123	116	142	116	95	88	92	104	87
CFSM	1.36	1.83	3.98	2.56	2.36	3.83	2.86	2.47	1.32	1.69	3.48	1.27
IN.	1.56	2.04	4.60	2.95	2.56	4.42	3.18	2.85	1.47	1.95	4.02	1.41
AC-FT	6250	8190	18460	11860	10270	17730	12790	11460	5890	7820	16140	5680

CAL YR 1983	TOTAL	94994	MEAN 260	MAX 7090	MIN 89	CFSM 3.45	IN 46.93	AC-FT	188400	
WTR YR 1984	TOTAL	66820	MEAN 183	MAX 2090	MIN 87	CFSM 2.43	IN 33.01	AC-FT	132500	

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02376300 BRUSHY CREEK NEAR WALNUT HILL, FL

LOCATION.--Lat 30°53'21", long 87°32'24", in SE¼ sec. 4, T.4 N., R.33 W., Escambia County, Hydrologic Unit 03140106, near right bank on downstream side of county road bridge, 1,000 ft downstream from Rocky Creek, 2.0 mi west of Walnut Hill, and 7.9 mi upstream from mouth.

DRAINAGE AREA.--49 mi², approximately.

PERIOD OF RECORD.--January 1958 to current year.

REVISED RECORDS.--WSP 1906: 1958-60. WDR FL-80-4: 1958-59, 1961, 1963-65, 1967-68, 1970, 1973, 1975-79 (M).

GAGE.--Nonrecording gage. Datum of gage is 118.32 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 2, 1978, water-stage recorder at same site and datum.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--26 years, 107 ft³/s, 29.65 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,680 ft³/s Mar. 31, 1962, gage height, 14.96 ft from rating curve extended above 2,500 ft³/s; minimum discharge, 36 ft³/s, Sept. 9-16, 1968; minimum gage height, 2.47 ft Oct. 10, 11, 15-17, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,680 ft³/s Aug. 2, gage height, 10.00 ft estimated; minimum daily discharge, 52 ft³/s Oct. 2, 3, 8-10 and Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	55	76	107	83	99	77	69	68	58	348	64
2	52	55	72	95	82	91	86	70	66	57	1180	63
3	52	55	72	90	83	85	433	107	65	57	1030	69
4	54	55	177	87	177	90	360	91	63	56	507	67
5	54	65	141	83	117	372	133	75	62	55	638	67
6	53	57	132	81	90	717	96	73	61	55	342	65
7	53	56	115	79	86	433	87	69	61	54	129	62
8	52	56	86	77	82	181	88	82	59	54	97	61
9	52	56	80	88	81	113	194	77	58	59	83	59
10	52	56	74	250	81	105	147	68	58	57	80	59
11	68	55	360	336	81	96	97	66	57	55	80	69
12	120	55	595	136	80	93	93	65	57	69	93	64
13	240	55	240	96	124	105	88	63	67	80	89	59
14	110	55	165	89	103	97	86	63	66	58	87	59
15	77	65	126	86	83	94	86	62	66	55	117	67
16	64	58	100	107	81	86	79	61	65	70	80	61
17	61	57	90	97	81	85	79	61	64	113	78	59
18	59	56	88	113	80	83	79	61	63	82	111	59
19	58	73	82	162	78	113	78	59	62	80	75	58
20	58	198	81	120	77	325	77	56	75	81	72	58
21	58	125	80	96	81	281	77	71	102	66	75	57
22	57	74	78	91	81	126	86	377	65	59	71	56
23	74	85	93	86	76	97	83	547	63	55	70	56
24	64	287	81	168	74	89	75	168	62	55	83	55
25	59	222	76	312	73	94	73	124	61	73	79	55
26	57	93	74	290	103	86	70	116	57	62	70	54
27	56	81	83	176	360	86	73	83	56	57	70	54
28	55	134	270	122	331	86	74	116	56	74	66	53
29	55	247	582	103	120	82	72	86	57	71	65	53
30	55	101	360	93	---	80	69	75	65	66	65	52
31	55	---	144	87	---	77	---	71	---	75	64	---
TOTAL	2087	2742	4873	4003	3129	4647	3295	3232	1907	2018	6094	1794
MEAN	67.3	91.4	157	129	108	150	110	104	63.6	65.1	197	59.8
MAX	240	287	595	336	360	717	433	547	102	113	1180	69
MIN	52	55	72	77	73	77	69	56	56	54	64	52
CFSM	1.37	1.87	3.20	2.63	2.20	3.06	2.25	2.12	1.30	1.33	4.02	1.22
IN.	1.58	2.08	3.70	3.04	2.38	3.53	2.50	2.45	1.45	1.53	4.63	1.36
AC-FT	4140	5440	9670	7940	6210	9220	6540	6410	3780	4000	12090	3560

CAL YR 1983 TOTAL 52768 MEAN 145 MAX 2230 MIN 48 CFSM 2.96 IN 40.06 AC-FT 104700
WTR YR 1984 TOTAL 39821 MEAN 109 MAX 1180 MIN 52 CFSM 2.22 IN 30.23 AC-FT 78980

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02376500 PERDIDO RIVER AT BARRINEAU PARK, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°41'25", long 87°26'25", in NW¼ sec.23, T.4 S., R.6 E., Baldwin County, Ala., Hydrologic Unit 03140106, on right bank 25 ft downstream from bridge on county road, 1,000 ft downstream from Alligator Creek, 0.5 mi southwest of Barrineau Park, and 27 mi upstream from mouth.

DRAINAGE AREA.--394 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1941 to current year.

REVISED RECORDS.--WSP 1384: Drainage area. WDR FL-76-4: 1973-75 (M).

GAGE.--Water-stage recorder. Datum of gage is 25.77 ft National Geodetic Vertical Datum of 1929. Prior to Aug. 22, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good.

AVERAGE DISCHARGE.--43 years, 768 ft³/s 26.47 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,000 ft³/s Apr. 15, 1955, gage height, 23.94 ft, from rating curve extended above 11,400 ft³/s, based on slope-area study made in 1955; minimum, 188 ft³/s Oct. 12-18, 1973; minimum gage height, 1.24 ft Oct. 1-6, 15-17, 20-25, 28-31, Nov. 1-3, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 15, 1929, reached a stage of 25.7 ft present datum, from information by local resident (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 13	2100	5,470	12.58	Apr. 4	0400	4,510	11.41
Mar. 6	1700	4,100	10.80	Aug. 4	0900	*8,670	15.16

Minimum discharge, 285 ft³/s Sept. 30; minimum gage height, 1.84 ft Oct. 8, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	319	321	1120	2010	691	1850	485	391	429	315	956	403
2	315	319	817	1230	637	1200	471	385	391	305	4580	397
3	313	315	605	875	641	807	2480	389	375	297	7740	411
4	313	315	723	732	921	680	4000	445	359	313	8400	405
5	313	345	871	664	975	854	2540	461	347	307	5770	401
6	311	351	927	619	991	3500	1700	429	339	299	3660	381
7	307	339	1050	587	1020	3840	1140	401	333	347	2690	365
8	305	331	917	556	807	3670	820	389	327	349	1660	351
9	303	329	840	535	667	2460	959	415	321	359	1090	341
10	311	327	723	798	609	1370	1090	440	317	341	785	337
11	514	321	1680	1290	573	956	1120	409	311	307	652	349
12	491	319	3610	1320	574	788	1100	377	313	301	692	355
13	913	317	4670	1250	778	744	851	359	395	325	931	347
14	827	321	4430	1020	816	723	680	347	379	359	788	331
15	566	331	2450	778	757	683	593	341	355	339	910	327
16	471	373	1300	724	731	649	535	337	357	363	741	345
17	381	369	977	752	724	610	505	337	379	429	634	333
18	363	353	801	782	663	575	485	329	401	616	578	323
19	349	343	692	1040	615	553	471	319	468	804	541	319
20	339	791	625	1010	574	1640	461	315	417	868	569	317
21	331	1150	587	912	576	1930	452	335	508	698	766	311
22	331	738	602	831	602	1490	445	569	436	532	566	307
23	468	602	686	714	551	1400	461	1730	373	411	520	305
24	438	934	652	1290	548	1020	464	2560	351	355	464	303
25	383	1550	605	2260	520	763	445	3500	345	399	610	299
26	361	1130	559	2040	498	664	429	2070	329	395	680	297
27	347	977	535	1860	2230	622	422	899	311	357	503	293
28	335	1060	1070	1660	2350	599	415	622	307	339	701	289
29	329	1160	1970	1230	1790	566	409	599	311	369	566	287
30	325	1130	2330	943	---	529	401	578	319	403	452	285
31	321	---	2600	782	---	503	---	485	---	447	422	---
TOTAL	12293	17561	42024	33094	24429	38238	26829	21562	10903	12648	50617	10114
MEAN	397	585	1356	1068	842	1233	894	696	363	408	1633	337
MAX	913	1550	4670	2260	2350	3840	4000	3500	508	868	8400	411
MIN	303	315	535	535	498	503	401	315	307	297	422	285
CFSM	1.01	1.49	3.44	2.71	2.14	3.13	2.27	1.77	.92	1.04	4.15	.86
IN.	1.16	1.66	3.97	3.12	2.31	3.61	2.53	2.04	1.03	1.19	4.78	.95
AC-FT	24380	34830	83350	65640	48450	75850	53220	42770	21630	25090	100400	20060

CAL YR 1983 TOTAL 414623 MEAN 1136 MAX 20100 MIN 303 CFSM 2.88 IN 39.15 AC-FT 822400
WTR YR 1984 TOTAL 300312 MEAN 821 MAX 8400 MIN 285 CFSM 2.08 IN 28.35 AC-FT 595700

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02376500 PERDIDO RIVER AT BARRINEAU PARK, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1957 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
DEC 02...	1010	820	31	5.0	12.5	6.2	6.4	60	70	50	5	3
FEB 14...	1510	816	24	5.5	14.0	5.3	9.2	89	190	38	4	1
APR 06...	1930	1530	23	5.1	16.5	9.7	7.8	80	76	37	4	2
MAY 18...	0815	329	23	6.1	19.0	4.9	8.2	88	K17	59	4	0
AUG 21...	1425	710	24	5.1	24.0	5.0	7.1	85	190	200	5	3

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
DEC 02...	.98	.71	2.0	42	.4	.50	2.0	39	6.0	4.3	<.10	7.5
FEB 14...	.77	.60	1.9	46	.4	.30	3.0	18	2.3	3.6	<.10	6.0
APR 06...	.79	.45	1.6	45	.4	.40	2.0	31	2.7	3.0	<.10	5.1
MAY 18...	.70	.51	2.0	51	.5	.30	3.0	4.6	1.0	4.7	<.10	6.7
AUG 21...	.92	.54	1.7	42	.4	.40	2.0	31	4.8	3.5	<.10	6.8

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC 02...	30	24	.04	66	.13	<.010	--	.10	--	.06	.040	.020
FEB 14...	24	17	.03	53	.15	.020	.03	.20	.040	.12	.010	.030
APR 06...	16	16	.02	66	<.10	<.010	--	.10	.010	.03	.010	<.010
MAY 18...	29	18	.04	26	.28	<.010	--	1.2	.070	.21	.070	.040
AUG 21...	27	20	.04	52	.16	<.010	--	.60	.030	--	<.010	<.010

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)
DEC 02...	.06	140	1	40	<.5	<1	<1	<3	1	150	1	4
FEB 14...	.09	--	--	--	--	--	--	--	--	--	--	--
APR 06...	--	160	<1	27	<1.0	<1	<1	<3	2	170	<1	<4
MAY 18...	.12	20	<1	19	<1.0	<1	<1	<3	2	72	4	7
AUG 21...	--	130	<1	26	<.0	2	1	<3	4	280	3	6

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02376500 PERDIDO RIVER AT BARRINEAU PARK, FL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC												
02...	75	<.1	<10	1	<1	<1	9	<6	14	43	95	14
FEB												
14...	--	--	--	--	--	--	--	--	--	10	22	50
APR												
06...	43	<.1	<10	1	<1	<1	7	<6	7	20	83	45
MAY												
18...	14	<.1	<10	3	<1	<1	7	<6	20	9	8.0	67
AUG												
21...	41	<.1	<10	1	<1	1	7	<6	31	15	29	53

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As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage and flood-hydrograph partial-record stations are presented in a table of annual maximum stage and discharge. Discharge measurements made at miscellaneous sites for both low flows and high flows are given in a second table.

Crest-stage and flood-hydrograph partial-record stations

The following table contains annual maximum discharges for crest-stage and flood hydrograph stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A flood hydrograph station is a continual-record station that records the river stage of storm events above a base stage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage and flood-hydrograph partial-record stations

Station No.	Station Name	Location	Drainage area (mi^2)	Period of Record	Annual Maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Waccasassa River Basin					
02313400	Waccasassa River near Bronson, Fla.	Lat 29°31'32", long 82°42'58", in NE¼ sec.4,T.12 S., R.16 E., Levy County, Hydrologic Unit 03110101, at bridge on U.S. Highway Alternate 27, 2.5 mi upstream from Little Waccasassa River, 5 mi northwest of Bronson, and 28 mi upstream from mouth. Datum of gage is 40.94 ft National Geodetic Vertical Datum of 1929.	[a]229	1966-78 1980-84	09-29-84	4.66	305
		Suwannee River Basin					
02319300	Withlacoochee River near Madison, Fla.	Lat 30°28'56", long 83°14'35", in SW¼ sec.17, T.1 N.,R.11 E., Hamilton County, Hydrologic Unit 03110202, on left bank at downstream side of bridge on State Highway 6, 10.2 mi east of Madison, Madison County, and 12 mi upstream from mouth. Discontinued Sept. 30, 1984.	[a]2,300	1964-72 1975-84	03-12-84	72.57	31000
02320860	Rocky Creek near Hague, Fla.	Lat 29°49'02", long 82°22'17", in SW¼ sec.1, T.8 S., R.19 E., Alachua County, Hydrologic Unit 03110206, at downstream side of bridge on County Road NW18C, 0.9 mi east of SR121, 2.7 mi southwest of LaCrosse, 4.6 mi northeast of Hague, and 5 mi above mouth.	14.9	1984	12-19-83	6.11	269
[b]02322050	Shiloh Run near Alachua, Fla.	Lat 29°49'06", long 82°28'21", in SW¼ sec.1, T.8 S., R.18 E., Alachua County, Hydrologic Unit 03110206, 6 ft upstream from culvert on County Road S-239, 0.7 mi above mouth, and 2.8 mi northeast of Alachua. Altitude of gage is 125 ft from topographic map.	0.32	1983 1984	03-07-83 03-27-84	4.40 4.31	[c] 8.9
		Aucilla River Basin					
02326250	Aucilla River near Aucilla, Fla.	Lat 30°29'31", long 83°43'53", in NW¼ sec.16, T.1 N., R.6 E., Jefferson County, Hydrologic Unit 03110103, at bridge on U.S. Highway 90, 1.3 mi northeast of Aucilla and 48 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929.	345	1965-84	04-08-84	79.82	3300

[a] Approximately
[b] Flood-hydrograph Station
[c] Not Determined

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Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station Name	Location	Drainage area (mi²)	Period of Record	Annual Maximum Date	Annual Maximum Gage height (feet)	Annual Maximum Discharge (ft³/s)
		Aucilla River Basin--continued					
02326261	Little Aucilla River near Cherry Lake, Fla.	Lat 30°37'36", long 83°29'44", in SW¼ sec.26, T.3 N., R.8 E., Madison County, Hydrologic Unit 03110103, at culvert on State Highway S253, 5.1 mi northwest of Cherry Lake, and 11.9 mi northwest of Madison. Datum of gage is 97.71 ft National Geodetic Vertical datum of 1929.	[a]13.9	1970-84	04-05-84	8.12	430
[b]0326372	Palmer Mill Branch at Monticello, Fla.	Lat 30°23'37", long 83°50'42", in SE¼ sec.29, T.2 N., R.5E., Jefferson County, Hydrologic Unit 03110103 on right bank 10 feet upstream from culvert on U.S. Highway 90, 1.5 mi above mouth and 1.5 mi east of Jefferson County Courthouse in Monticello. Altitude of gage is 110 ft from topographic map.	0.48	1983 1984	03-07-83 02-27-84	6.19 7.20	[c] [c]
		St. Marks River Basin					
[b]02326828	Northeast drainage ditch at Capital Circle Tallahassee, Fla.	Lat 30°28'42", long 84°14'12", in SW¼ sec.16, T.1 N., R.1 E., Leon County, Hydrologic Unit 03120001, on right bank, 20 ft upstream from culverts on Capital Circle Northeast, 2.6 mi north of the Federal Corrections Institution, and 3.9 mi northeast of the Florida Capitol Building at Tallahassee.	3.98	1979-84	03-06-84	20.46	435
[b]02326838	Northeast drainage ditch at Miccosukee Road at Tallahassee, Fla.	Lat 30°27'50", long 84°14'24", in SW¼ sec.21, T.1 N., R.1 E., Leon County, Hydrologic Unit 03120001, on right bank, 20 ft upstream from culverts on Miccosukee Road 0.2 mi east of County Prison Farm, and 3.1 mi northeast of the Florida Capitol Building at Tallahassee. Datum of gage is 58.18 ft National Geodetic Vertical Datum of 1929.	[d]9.83	1979-84	03-06-84	7.65	805
[b]02327014	St. Augustine Branch at Wahnish Way at Tallahassee, Fla.	Lat 30°25'55", long 84°17'24", in NW¼ sec.1, T.1 S., R.1 W., Leon County, Hydrologic Unit 03120001, on left bank 30 ft upstream from bridge on Wahnish Way, 0.2 mi south of Tallahassee train depot, and 0.6 mi southwest of Florida Capitol Building at Tallahassee. Datum of gage is 64.93 ft National Geodetic Vertical Datum of 1929.	[e]2.18	1979-84	02-27-84	8.96	1120
[b]302549 084152900	East drainage ditch at Apakin Nene at Tallahassee, Fla.	Lat 30°25'48", long 84°15'29", in NW¼ sec.5, T.1 S., R.1 E., Leon County, Hydrologic Unit 03120001, on left bank, 8 ft up-stream from culvert on Apakin Nene, 0.5 mi southeast of Parkway Shopping Center, and 1.5 mi east of Florida Capitol Building at Tallahassee. Altitude of gage is 110 ft from topographic map.	0.21	1979-84	02-27-84	4.57	92
		Ochlockonee River Basin					
02327050	Sopchoppy River near Arran, Fla.	Lat 30°13'50", long 84°32'20", in SW¼ sec.9, T.3 S., R.3 W., Wakulla County, Hydrologic Unit 03120003, at bridge on U.S. Forest Service Road 315, 1.3 mi downstream from unnamed tributary, 7.9 mi northwest of Arran, and 34 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929. (Florida Department of Transportation bench mark.)	48.2	1965-84	04-06-84	56.29	2040

[a] Approximately
[b] Flood-hydrograph Station
[c] Not determined
[d] Of which 0.19 mi² is noncontributing
[e] Of which 0.12 mi² is noncontributing

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Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station Name	Location	Drainage area (mi²)	Period of Record	Annual Maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Ochlockonee River Basin--continued					
[b]02329181	Mall drainage ditch at Boone Blvd. at Tallahassee, Fla.	Lat 30°28'01", long 84°17'22", in SW¼ sec.24, T.1 N., R.1 W., Leon County, Hydrologic Unit 03120003, on right bank, 20 ft upstream from culvert and weir, and 0.1 mi west of Northwood Mall on Boone Blvd., 2 mi north of Florida Capitol Building at Tallahassee.	0.26	1979-84	02-27-84	9.42	207
02329490	Willacoochee Cr. near Quincy, Fla.	Lat 30°38'13", long 84°30'02", in NE¼ sec.26, T.3 N., R.3 W., Gadsden County, Hydrologic Unit 03120003, at bridge on State Highway 161, 1.6 mi southwest of Branchville, and 5.6 mi northeast of Quincy. Datum of gage 106.42 ft above National Geodetic Vertical Datum of 1929.	64.9	1974-77 1979-84	03-06-84	9.26	6850
02329600	Little River near Midway, Fla.	Lat 30°30'34", long 84°31'25", in SW¼ sec.3, T.1 N., R.3 W., Gadsden County, Hydrologic Unit 03120003, at bridge on State Highway 268 0.5 mi upstream from mouth, and 3.7 mi west of Midway. Datum of gage is National Geodetic Vertical Datum of 1929.	305	1965-84	03-07-84	81.14	17400
02330050	Telogia Creek near Greensboro, Fla.	Lat 30°33'34", long 84°43'36", in NW¼ sec.22, T.2 N., R.5 W., Gadsden County, Hydrologic Unit 03120003, at bridge on State Highway 274, 1.2 mi southwest of Greensboro, 1.3 mi upstream from Tallahassee Creek, and 54 mi upstream from mouth. Datum of gage is 100.00 ft above National Geodetic Vertical Datum of 1929.	28.1	1965-84	03-07-84	96.59	3960
[b]02330119	Hosford Branch at Hosford, Fla.	Lat 30°23'48", long 84°48'32", in NW¼ sec.14, T.15., R.6 w., Liberty County, Hydrologic Unit 03120002, on right bank 15 ft upstream from culvert on State Highway 20, 0.8 mi northwest of Hosford, and 1.6 mi above mouth. Altitude of gage is 80 ft from topographic map.	0.72	1983 1984	04-23-83 03-06-84	8.08 8.53	108 127
		Carrabelle River Basin					
02330400	New River near Sumatra, Fla.	Lat 30°02'19", long 84°50'38", in SE¼ sec.16, T.5 S., R.6 W., Liberty County, Hydrologic Unit 03130013, at bridge on U. S. Forest Service Road 120, 1.8 mi below Cat Branch, 8.2 mi east of Sumatra ,and 29 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929.	157	1965-84	08-01-84	24.14	3200
		Apalachicola River Basin					
02358998	Holliman Branch near Altha, Fla.	Lat 30°32'43", long 85°09'33", in NW¼ sec.29, T.2 N., R.9 W., Calhoun County, Hydrologic Unit 03130011, on right bank 15 ft upstream from culvert on State Highway 274, 0.5 mi upstream from mouth, and 2.6 mi southwest of Altha. Datum of gage is 54.92 ft National Geodetic Vertical Datum of 1929.	2.04	1969-84	03-06-84	6.50	284

[b] Flood-hydrograph Station

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Annual maximum discharge at crest-stage partial-record stations during water year 1984--Continued

Station No.	Station Name	Location	Drainage area (mi²)	Period of Record	Annual Maximum		
					Date	Gage height (feet)	Discharge (ft³/s)
		Econfina Creek Basin					
02359550	Bear Creek near Youngstown, Fla.	Lat 30°19'10", long 85°27'20", in NE¼ sec. 17, T.2 S., R.12 W., Bay County, Hydrologic Unit 03140101, at bridge on U.S. Highway 231, 0.1 mi downstream from South Fork Bear Creek, 3.2 mi south of Youngstown, and 12 mi upstream from mouth. Datum of gage is 10.14 ft above National Geodetic Vertical Datum of 1929.	67.2	f1962-65 1966-84	03-06-84	16.50	6270
		Choctawhatchee River Basin					
02365237	Fowler Branch near Leonia, Fla.	Lat 30°55'17", long 85°56'01", in NW¼ sec.22, T.6 N., R.17 W., Holmes County, Hydrologic Unit 03140203, at culvert on State Highway 160, 0.6 mi upstream from mouth, 5.0 mi east of Leonia, and 13.2 mi north of Ponce de Leon. Datum of gage is 75.90 ft above National Geodetic Vertical Datum of 1929.	5.09	1969-84	03-06-84	8.19	427
02365470	Wrights Creek at SR 177A near Bonifay, Fla.	Lat 30°51'25", long 85°45'44", in NW¼ sec.8, T.5 N., R.15 W., Holmes County, Hydrologic Unit 03140203, on right downstream side of bridge on State Highway 177-A, 7.3 mi upstream of mouth and 7.6 mi northwest of Bonifay. Altitude of gage is 55 ft from topographic map.	148	1983-84	06-12-83 03-06-84	11.09 13.73	c c
02365700	Sandy Creek at Ponce de Leon, Fla.	Lat 30°43'28", long 85°56'12", in SE¼ sec.28, T.4 N., R.17 W., Holmes County, Hydrologic Unit 03140203, at bridge on State Highway 81 at Ponce de Leon and 10 mi upstream from mouth. Datum of gage is 42.94 ft National Geodetic Vertical Datum of 1929.	a80.7	1961-84	03-06-84	9.65	1410
02366859	Pate Branch near Freeport, Fla.	Lat 30°28'44", long 86°24'05", in SW¼ sec.20, T.1 S., R.18 W., Walton County, Hydrologic Unit 03140203, at culvert on State Highway 20, 0.6 mi upstream from Turnpike Branch, and 4.0 mi southeast of Freeport. Datum of gage is 5.02 ft National Geodetic Vertical Datum of 1929.	1.87	1969-84	04-04-84	9.34	197
		Blackwater River Basin					
02370550	Clear Creek near Milton, Fla.	Lat 30°39'55", long 87°00'17" in SW¼ sec.24, T.2 N., R.28 W., Santa Rosa County, Hydrologic Unit 03140104, on downstream side of bridge on State Highway 191, 1.2 mi above mouth and 3.0 mi northwest of Milton.	24.0	1984	03-07-84	7.48	440
		Carpenter Creek Basin					
02376079	Carpenter Creek at Pensacola, Fla.	Lat 30°28'15", long 87°12'48", in land grant 50, T.1 S., R.30 W., Escambia County, Hydrologic Unit 03140107, at culvert on State Highway S289, 0.9 mi upstream from mouth at Bayou Texar, Pensacola. Datum of gage is 3.11 ft National Geodetic Vertical Datum of 1929.	8.84	1971-84	08-02-84	11.57	951

a Approximately
b Flood-hydrograph station
f Operated as a continuous record gaging station

ELEVATION AND WATER QUALITY OF LAKES

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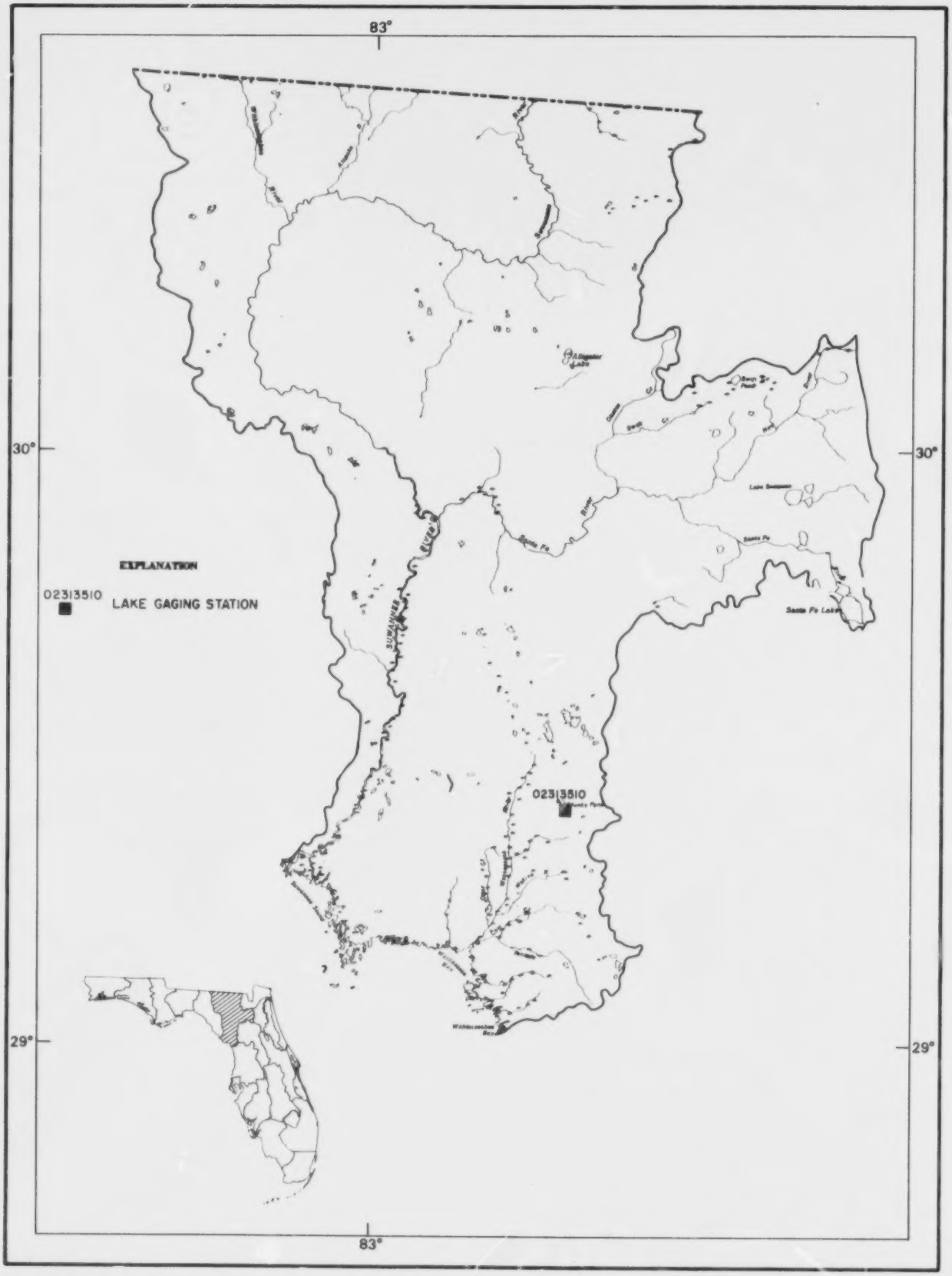

Figure 10. Location of lake gaging stations in the Waccasassa River basin.

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02313510 CHUNKY POND NEAR BRONSON, FL

LOCATION.--Lat 29°23'36", long 82°37'19" (base gage), in SW¼ sec.33, T.12 S., R.17 E., Levy County, Hydrologic Unit 03110101, at southeast end of pond, near center of outlet channel, 200 ft upstream from culvert control and 3.7 mi south of Bronson.

SURFACE AREA.--650 acres (1.02 mi²).

DRAINAGE AREA.--23 mi², approximately.

PERIOD OF RECORD.--January to April 1967 (fragmentary); May 1967 to March 1978 (weekly) incomplete; April 1978 to current year (twice monthly).

GAGE.--Nonrecording gage. Datum of gage is National Geodetic vertical Datum of 1929 (Florida Department of Transportation bench mark). Supplementary nonrecording gages about 600 ft northeast; 0.5 mi north; and 400 ft west of north gage.

REMARKS.--Lake level partially controlled by culvert with lift gate in outlet canal. Outflow from lake is through a canal southward to a swampy area called Deerpen Pond and thence through Magee Branch to Waccasassa River.

COOPERATION.--Gage readings were furnished by Suwannee River Water Management District.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 56.00 ft Sept. 7, 1967; lake dry at gage during November and December 1977, elevation not determined. Minimum observed since December 1977, 45.80 ft Nov. 18, 1978.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			APR		
14...	1530	54.68	13...	1530	54.66
28...	1530	54.54	27...	1530	54.44
NOV			MAY		
10...	1530	54.52	11...	1530	54.16
23...	1530	54.68	24...	1530	54.20
DEC			JUN		
09...	1530	54.56	08...	1530	54.24
22...	1530	54.60	22...	1530	54.16
JAN			JUL		
13...	1530	54.82	13...	1530	54.74
27...	1530	54.78	27...	1530	54.82
FEB			AUG		
10...	1530	54.46	10...	1530	55.04
24...	1530	54.72	24...	1530	54.88
MAR			SEP		
08...	1530	54.82	14...	1530	54.46
23...	1530	54.58			

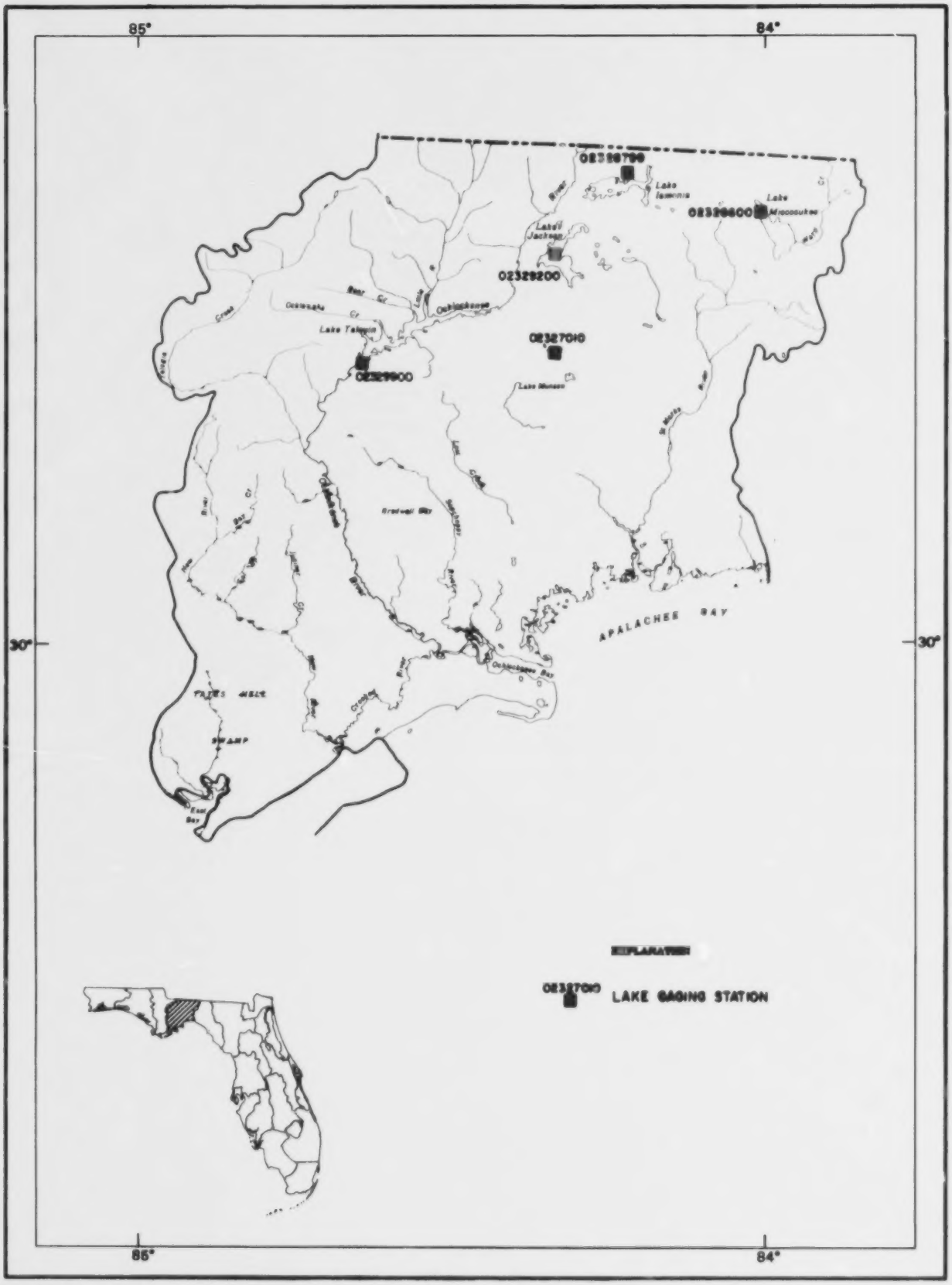

Figure 11. Location of lake gaging stations in the St. Marks, and Ochlockonee River basins.

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02326600 LAKE MICCOSUKEE NEAR MICCOSUKEE, FL

LOCATION.--Lat 30°36'14", long 84°00'15", in NW¼ sec.2, T.2 N., R.3 E., Jefferson County, Hydrologic Unit 03120001, at fish camp on west shore of lake, 2.3 mi northeast of Miccosukee, Leon County.

SURFACE AREA.--6,312 acres (9.86 mi²) at elevation 80 ft above NGVD.

DRAINAGE AREA.--240 mi².

PERIOD OF RECORD.--August 1965 to September 1972 (weekly); October 1972 to Nov. 1983 (periodically); Nov. 1983 to Sept. 1984 (once-daily).

GAGE.--Nonrecording gage. Datum of gage is 66.46 ft National Geodetic Vertical Datum of 1929. Gage readings have been reduced to elevations NGVD.

REMARKS.--Lake elevation is controlled by two structures. The outflow at the south end has fixed timber pile dam. An earthen dam, with a fixed concrete spillway and an underdrain consisting of a 7 ft culvert with lift gate, encircles a sinkhole at north end of lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 82.64 ft Apr. 7, 1973; minimum observed, 72.45 ft Jan. 12, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 82.14 ft Apr. 5; minimum observed, 78.86 ft Nov. 16.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	79.60	79.86	80.02	80.46	81.74	80.16	79.50	79.20	80.16	79.60
2	---	---	79.60	79.86	80.02	80.46	81.86	80.16	79.50	79.28	80.14	79.60
3	---	---	79.60	79.86	79.96	80.46	81.76	80.08	79.48	79.42	80.12	79.58
4	---	78.96	79.60	79.86	80.14	80.46	82.10	80.06	79.46	79.42	80.06	79.58
5	---	78.96	79.61	79.82	80.16	80.46	82.14	80.02	79.46	79.42	80.04	79.56
6	---	78.96	79.68	79.82	80.16	80.96	81.96	79.96	79.42	79.54	80.02	79.56
7	---	78.92	79.62	79.82	80.16	81.14	81.86	79.96	79.40	79.54	79.98	79.56
8	---	78.92	79.62	79.82	80.14	81.21	81.74	79.86	79.40	79.54	79.92	79.56
9	---	78.92	79.62	79.82	80.12	81.28	81.86	79.84	79.36	79.52	79.86	79.54
10	---	78.92	79.62	79.82	80.12	81.38	81.82	79.78	79.36	79.56	79.76	79.52
11	---	78.92	79.62	79.82	80.12	81.38	81.74	79.76	79.34	79.54	79.80	79.50
12	---	78.90	79.76	79.82	80.14	81.40	81.60	79.70	79.32	79.54	79.78	79.48
13	---	78.90	79.76	79.78	80.14	81.32	81.44	79.70	79.30	79.52	79.76	79.46
14	---	78.90	79.78	79.78	80.16	81.30	81.34	79.66	79.30	79.52	79.74	79.46
15	---	78.90	79.78	79.78	80.16	81.08	81.34	79.64	79.28	79.52	79.70	79.46
16	---	78.86	79.76	79.78	80.14	81.02	81.06	79.58	79.26	79.58	79.68	79.46
17	---	78.88	79.76	79.74	80.14	80.92	80.98	79.56	79.26	79.58	79.66	79.46
18	---	78.88	79.86	79.74	80.14	80.82	80.84	79.56	79.22	79.58	79.66	79.36
19	---	78.86	79.86	79.74	80.10	80.82	80.84	79.52	79.22	79.70	79.74	79.36
20	---	79.04	79.86	79.74	80.10	80.70	80.76	79.52	79.20	79.94	79.74	79.36
21	---	79.02	79.92	79.74	80.06	80.64	80.66	79.48	79.18	79.96	79.72	79.32
22	---	79.04	79.92	79.74	80.06	80.64	80.48	79.48	79.18	79.96	79.72	79.32
23	---	79.04	79.92	79.72	80.10	80.52	80.44	79.48	79.18	79.96	79.70	79.30
24	---	79.36	79.92	79.72	80.10	80.42	80.38	79.52	79.20	79.92	79.68	79.26
25	---	79.46	79.76	79.72	80.04	80.42	80.30	79.50	79.20	79.92	79.74	79.26
26	78.92	79.46	79.76	79.72	80.04	80.42	80.26	79.50	79.20	79.88	79.72	79.26
27	---	79.46	79.76	79.96	80.16	80.42	80.26	79.50	79.20	79.86	79.70	79.22
28	---	79.60	79.86	80.02	80.44	80.86	80.22	79.50	79.20	79.86	79.68	79.20
29	---	79.66	79.86	80.02	80.42	81.06	80.18	79.50	79.20	79.88	79.64	79.18
30	---	79.66	79.86	80.02	---	81.38	80.16	79.52	79.20	80.06	79.64	79.18
31	---	---	79.86	80.02	---	81.62	---	79.52	---	80.14	79.62	---
TOTAL	---	---	2472.37	2474.48	2323.76	2507.43	2434.12	2470.58	2378.98	2469.86	2473.88	2382.52
MEAN	---	---	79.75	79.82	80.13	80.88	81.14	79.70	79.30	79.67	79.80	79.42
MAX	---	---	79.92	80.02	80.44	81.62	82.14	80.16	79.50	80.14	80.16	79.60
MIN	---	---	79.60	79.72	79.96	80.42	80.16	79.48	79.18	79.20	79.62	79.18

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02327010 LAKE BRADFORD NEAR TALLAHASSEE, FL

LOCATION.--Lat 30°24'10", long 84°20'05", in NE¼ sec.16, T.1 S., R.1 W., Leon County, Hydrologic Unit 03120001, on east shore of lake at Florida State University dock, 4.0 mi southwest of State Capitol Building, Tallahassee. Auxillary staff gage 0.8 mi north.

SURFACE AREA.--182 acres, (0.28 mi²) at elevation 31 ft NGVD.

DRAINAGE AREA.--20.6 mi².

PERIOD OF RECORD.--February to December 1954, (weekly, incomplete); January 1955 to June 1960, (bimonthly, incomplete); July 1960 to November 1961 (monthly); January 1962 to October 1979 (bimonthly); January 1980 to current year (fragmentary). Published since October 1960.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Apr. 8, 1955 to Mar. 2, 1956, nonrecording gage at site 600 ft northwest at datum 19.53 ft higher. Since January, 1980, an auxillary nonrecording gage 0.8 mi northeast at present datum.

REMARKS.--Lake is a chain of lakes connected by Bradford Brook. When the lake level is high it is connected with two smaller lakes to the northwest - Lake Hiawatha and Lake Minnehaha. Surface outflow to the northwest is through Bradford Brook into Grassy Lake, thence into Munson Slough, and is controlled by three culverts, elevation 31.7 ft. Loss to ground water through sinkholes on the east shore was reduced by plugging in March 1954.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 37.08 ft April 5, 1973; minimum observed, 21.00 ft June 26, 1955.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.39	30.71	30.99	---	31.68	33.20	32.46	33.03	33.02	32.39	33.33	32.82
2	31.36	---	---	---	---	33.25	---	33.00	---	32.49	33.38	---
3	31.34	30.69	30.98	---	31.70	---	---	32.98	32.97	32.78	33.41	32.76
4	31.33	---	31.00	---	---	---	---	---	---	32.89	---	32.80
5	---	---	---	---	31.90	33.27	---	---	---	32.88	---	---
6	31.26	30.60	---	---	---	34.00	---	---	---	32.88	33.35	32.75
7	31.23	30.62	31.00	---	32.00	34.53	---	32.89	---	32.87	---	32.72
8	---	30.62	30.99	---	---	34.98	33.83	32.87	32.79	32.85	---	---
9	31.16	30.60	30.97	31.12	32.08	35.13	34.35	32.88	---	32.83	33.18	---
10	31.16	---	30.96	31.17	32.10	35.03	34.41	32.86	---	32.80	---	32.65
11	31.14	---	31.10	31.18	32.12	34.75	34.36	32.83	---	---	---	32.61
12	---	30.56	31.15	31.18	---	34.44	---	---	32.64	32.79	---	32.59
13	---	30.53	31.15	31.18	32.30	34.18	---	---	---	---	32.99	32.57
14	31.10	---	31.15	31.18	---	33.96	33.98	---	---	---	---	32.55
15	---	---	31.14	31.17	32.38	33.80	---	---	32.57	---	32.90	---
16	31.04	---	31.11	31.16	32.41	33.65	---	---	---	32.77	32.88	---
17	---	---	31.12	31.16	32.44	33.54	33.61	---	32.50	32.78	32.83	---
18	---	---	---	---	32.49	33.48	---	---	32.48	32.84	---	---
19	30.98	30.44	---	31.20	---	33.46	---	---	32.46	32.90	---	---
20	30.96	30.62	---	---	32.54	33.42	---	---	32.43	---	32.78	---
21	30.94	30.62	---	31.19	32.56	33.38	---	---	32.40	---	---	---
22	---	30.60	---	31.18	---	33.35	---	---	32.44	---	---	---
23	30.90	---	---	31.17	---	33.32	---	---	---	---	---	32.24
24	30.88	30.76	---	31.20	32.61	33.31	---	---	---	---	---	32.19
25	30.86	30.82	---	31.20	---	---	---	---	---	33.08	---	32.15
26	30.84	30.86	30.96	31.28	---	---	33.18	---	---	33.05	---	32.13
27	---	30.87	30.92	31.41	33.04	33.44	---	32.93	---	33.00	---	32.09
28	---	31.00	30.90	31.46	33.20	---	33.10	32.94	32.34	32.98	32.94	---
29	30.79	31.00	31.11	---	33.18	---	---	---	32.36	33.00	32.91	---
30	---	31.00	---	---	---	---	33.05	---	---	33.21	32.88	31.99
31	30.73	---	31.06	31.68	---	33.47	---	33.03	---	33.27	32.85	---

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02328799 LAKE IAMONIA NEAR BRADFORDVILLE, FL

LOCATION.--Lat 30°39'04", long 84°12'30", in NW¼ sec.23, T.3 N., R.1 E., Leon County, Hydrologic Unit 03120003, at northeast end of Van Brunt Arm portion of lake, 0.3 mi southeast of Tall Timbers Research Station, and 6.2 mi north of Bradfordville.

SURFACE AREA.--5,680 acres (8.9 mi²) at elevation, 98 ft NGVD.

DRAINAGE AREA.--101 mi².

PERIOD OF RECORD.--April 1919 to June 1937, 1957, 1963 (fragmentary); December 1974 to October 1975 (weekly); November 1975 to September 1977; February 1979 to September 1981 (weekly), October 1981 to September 1982 (monthly), October 1982 to September 1983 (fragmentary). Records published since February 1979.

GAGE.--Water-stage recorder. Datum of gage is 82.00 ft National Geodetic Vertical Datum of 1929. April 1919 to June 1937, nonrecording gage at various sites and datums. Dec. 1974 to October 1975, nonrecording gage at same site at datum 13.44 ft higher; November 1975 to September 1977, water-stage recorder at same site and datum; February 1979 to October 1983, nonrecording gage at same site and datum; November 1983 to current year. Gage heights have been reduced to elevations NGVD.

REMARKS.--Ochlockonee River overflows into lake at high stages.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 104.76 ft, Mar. 9, 1984; minimum observed, 96.00 ft Oct. 20, 1981, Jan 21, Dec. 2, 9, 1982.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 4, 1948, reached at stage of 106.97 ft from floodmarks from information by local resident. Lake dry, May 7, 1910, and in 1917 (month unknown), and Nov. 8, 1934, furnished by Dr. Komarek, Tall Timbers Research Center.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	98.01	98.41	100.05	100.47	102.97	101.15	[illegible].97	99.28	99.15	98.78
2		---	97.99	98.41	100.28	100.55	102.80	101.07	99.92	99.30	99.16	98.76
3		---	97.99	98.41	100.41	100.64	102.71	101.00	99.89	99.31	99.17	98.74
4		---	98.00	98.42	100.70	100.73	102.88	100.92	99.85	99.29	99.20	98.73
5		---	97.99	98.42	100.81	100.80	102.90	100.85	99.81	99.26	99.25	98.75
6		---	98.03	98.42	100.86	101.53	103.06	100.79	99.77	99.23	99.28	98.73
7		97.83	98.03	98.41	100.88	102.25	103.14	100.73	99.73	99.21	99.29	98.71
8		97.82	98.01	98.40	100.88	103.55	103.05	100.67	99.69	99.17	99.29	98.68
9		97.82	97.99	98.39	100.86	104.59	103.03	100.61	99.66	99.15	99.26	98.66
10		97.82	97.97	98.40	100.84	104.57	102.91	100.55	99.62	99.13	99.24	98.64
11		97.80	98.03	98.41	100.79	103.97	102.75	100.49	99.58	99.11	99.21	98.62
12		97.77	98.14	98.38	100.76	103.46	102.62	100.44	99.55	99.09	99.20	98.60
13		97.75	98.14	98.37	100.80	103.11	102.49	100.38	99.52	99.07	99.18	98.58
14		97.74	98.14	98.37	100.78	102.85	102.36	100.34	99.49	99.05	99.16	98.56
15		97.73	98.13	98.36	100.74	102.61	102.22	100.33	99.49	99.02	99.13	98.54
16		97.73	98.12	98.36	100.70	102.43	102.09	100.28	99.46	98.99	99.11	98.51
17		97.70	98.12	98.36	100.67	102.26	101.96	100.23	99.43	98.96	99.08	98.48
18		97.69	98.17	98.36	100.63	102.10	101.84	100.18	99.40	98.99	99.06	98.45
19		97.67	98.20	98.38	100.59	101.95	101.72	100.13	99.37	99.01	99.04	98.43
20		97.77	98.20	98.35	100.55	101.89	101.61	100.09	99.34	99.00	99.03	98.41
21		97.81	98.19	98.34	100.52	101.85	101.51	100.06	99.31	98.97	99.01	98.39
22		97.80	98.21	98.33	100.49	101.73	101.41	100.03	99.30	98.95	98.98	98.37
23		97.79	98.24	98.31	100.47	101.63	101.33	100.03	99.32	98.94	98.97	98.35
24		97.88	98.28	98.34	100.42	101.54	101.24	100.02	99.31	98.94	98.95	98.33
25		97.94	98.27	98.34	100.37	101.47	101.16	100.02	99.29	98.93	98.94	98.31
26		97.92	98.27	98.39	100.32	101.39	101.08	100.04	99.26	98.91	98.93	98.29
27		97.91	98.25	98.55	100.46	101.52	101.02	100.05	99.22	98.90	98.91	98.26
28		98.02	98.29	98.58	100.54	102.16	101.06	100.03	99.21	98.90	98.89	98.25
29		98.04	98.42	98.64	100.47	102.38	101.20	100.04	99.21	98.96	98.87	98.23
30		98.02	98.43	98.97	---	102.67	101.21	100.06	99.28	99.09	98.84	98.21
31		---	98.42	99.59	---	102.96	---	100.02	---	99.14	98.81	---
TOTAL		---	3042.67	3052.17	2917.64	3167.61	3063.33	3111.63	2985.25	3071.25	3071.59	2955.35
MEAN		---	98.15	98.46	100.61	102.18	102.11	100.38	99.51	99.07	99.08	98.51
MAX		---	98.43	99.59	100.88	104.59	103.14	101.15	99.97	99.31	99.29	98.78
MIN		---	97.97	98.31	100.05	100.47	101.02	100.02	99.21	98.90	98.81	98.21

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02329200 LAKE JACKSON NEAR TALLAHASSEE, FL

LOCATION.--Lat 30°32'37", long 84°19'23", in SW¼ sec.27, T.2 N., R.1 W., Leon County, Hydrologic Unit 03120003, on northeast side of lake, 3.0 mi west of Meridian Road, and 7.4 mi northwest of Tallahassee.

SURFACE AREA.--4,001 acres (6.25 mi²), at elevation 87 ft NGVD.

DRAINAGE AREA.--43.2 mi².

PERIOD OF RECORD.--March 1950 to January 1953, March 1954 to August 1956, September 1956 to August 1958 (fragmentary), September 1958 to current year. Records of elevation prior to October 1960 are available in file of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake has no surface outlet. Some outflow from lake through sinkhole to ground water.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 96.16 ft June 18, 1966 (from recorded range in stage); minimum observed, 75.68 ft Jan. 4, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 87.01 ft May 3; minimum, 81.14 ft Nov. 19.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81.76	81.41	81.67	82.05	82.28	83.06	85.60	86.97	86.89	86.65	86.93	86.81
2	81.74	81.39	81.67	82.05	82.27	83.06	85.62	86.96	86.87	86.71	86.95	86.79
3	81.73	81.37	81.67	82.05	82.28	83.07	85.73	86.96	86.86	86.75	86.96	86.77
4	81.72	81.36	81.68	82.05	82.53	83.08	86.17	87.00	86.84	86.75	86.96	86.79
5	81.70	81.34	81.68	82.04	82.58	83.12	86.19	86.99	86.81	86.74	86.97	86.85
6	81.69	81.33	81.71	82.04	82.57	83.97	86.23	86.99	86.80	86.72	87.00	86.84
7	81.67	81.32	81.70	82.03	82.59	84.33	86.25	86.98	86.78	86.70	86.99	86.82
8	81.65	81.31	81.70	82.03	82.60	84.42	86.27	86.97	86.76	86.68	86.96	86.79
9	81.65	81.30	81.69	82.02	82.60	84.45	86.57	86.97	86.73	86.66	86.94	86.76
10	81.64	81.29	81.68	82.05	82.61	84.47	86.68	86.95	86.71	86.64	86.92	86.73
11	81.62	81.26	81.74	82.02	82.60	84.49	86.72	86.93	86.69	86.63	86.90	86.71
12	81.63	81.24	81.85	82.03	82.62	84.51	86.75	86.91	86.67	86.64	86.89	86.70
13	81.63	81.22	81.87	82.01	82.69	84.53	86.78	86.90	86.64	86.62	86.88	86.68
14	81.61	81.22	81.88	82.01	82.72	84.55	86.81	86.88	86.64	86.60	86.87	86.67
15	81.60	81.21	81.88	82.01	82.73	84.56	86.82	86.87	86.66	86.57	86.85	86.65
16	81.58	81.19	81.87	82.01	82.74	84.57	86.82	86.85	86.66	86.55	86.83	86.64
17	81.60	81.17	81.86	82.01	82.74	84.57	86.83	86.82	86.66	86.54	86.81	86.61
18	81.66	81.16	81.90	82.01	82.73	84.57	86.86	86.79	86.64	86.58	86.82	86.57
19	81.65	81.15	81.92	82.02	82.73	84.58	86.87	86.77	86.62	86.64	86.85	86.54
20	81.63	81.26	81.92	82.02	82.72	84.64	86.88	86.75	86.60	86.65	86.85	86.52
21	81.62	81.32	81.91	82.00	82.72	84.71	86.89	86.73	86.65	86.66	86.86	86.50
22	81.60	81.31	81.90	82.00	82.72	84.72	86.89	86.72	86.70	86.69	86.84	86.48
23	81.58	81.31	81.90	81.99	82.72	84.72	86.90	86.76	86.71	86.68	86.83	86.45
24	81.55	81.40	81.83	82.02	82.72	84.72	86.91	86.80	86.70	86.67	86.88	86.43
25	81.53	81.49	81.82	82.03	82.70	84.72	86.90	86.85	86.68	86.66	86.88	86.41
26	81.51	81.51	81.83	82.08	82.70	84.72	86.90	86.93	86.66	86.64	86.93	86.38
27	81.49	81.53	81.83	82.23	82.93	84.98	86.90	86.93	86.64	86.65	86.91	86.37
28	81.47	81.64	81.88	82.28	83.02	85.45	86.91	86.92	86.62	86.65	86.89	86.33
29	81.45	81.68	81.99	82.29	83.03	85.54	86.97	86.95	86.62	86.71	86.87	86.30
30	81.44	81.68	82.02	82.29	---	85.57	86.97	86.94	86.64	86.83	86.85	86.28
31	81.43	---	82.04	82.27	---	85.59	---	86.91	---	86.89	86.83	---
TOTAL	2529.83	2440.37	2536.49	2544.04	2397.19	2618.04	2598.59	2693.65	2601.15	2686.75	2693.70	2598.17
MEAN	81.61	81.35	81.82	82.07	82.66	84.45	86.62	86.89	86.71	86.67	86.89	86.61
MAX	81.76	81.68	82.04	82.29	83.03	85.59	86.97	87.00	86.89	86.89	87.00	86.85
MIN	81.43	81.15	81.67	81.99	82.27	83.06	85.60	86.72	86.60	86.54	86.81	86.28

WTR YR 1984 TOTAL 30937.97 MEAN 84.53 MAX 87.00 MIN 81.15

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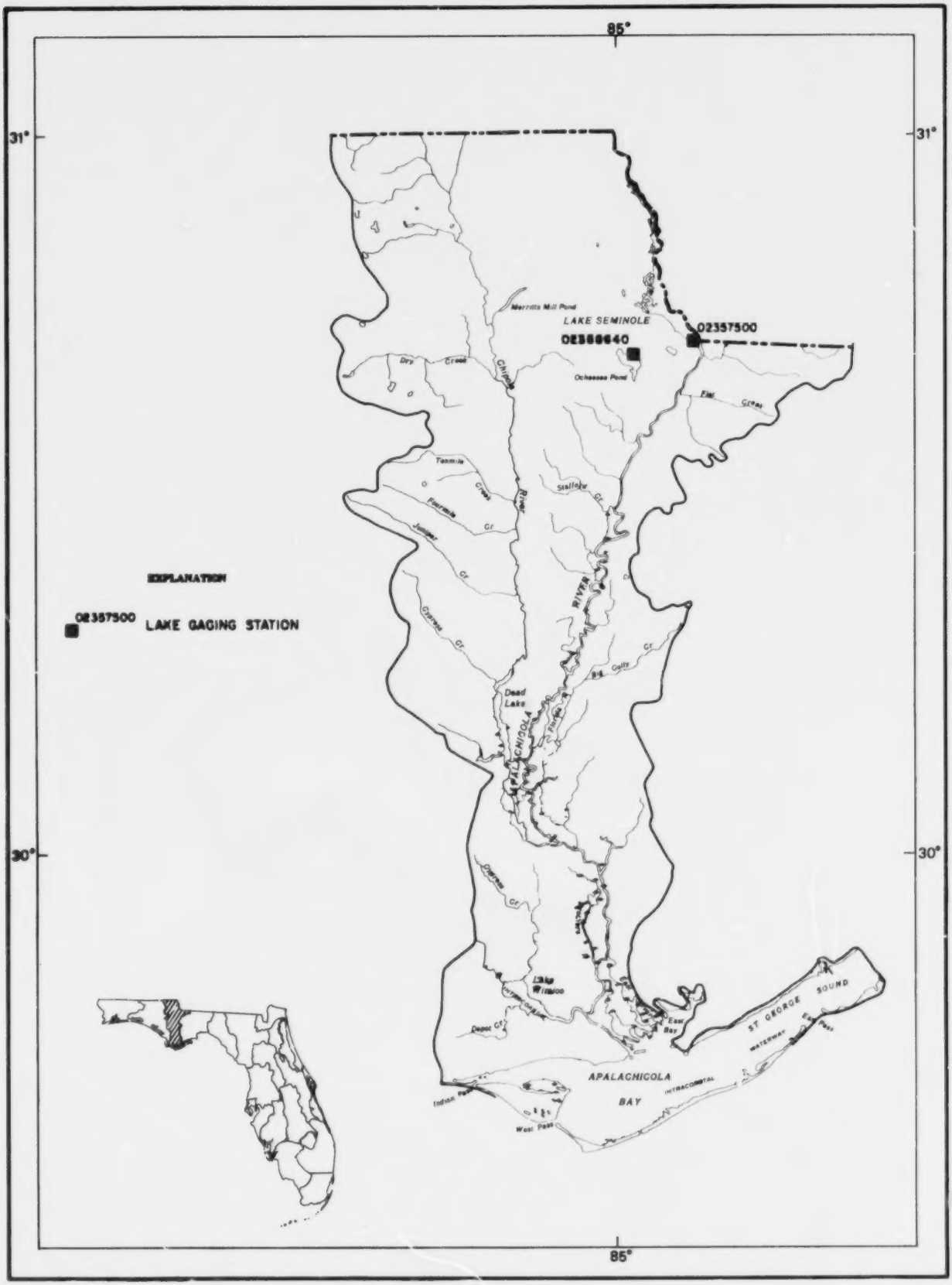

Figure 12. Location of lake gaging stations in the Apalachicola River basin.

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02357500 LAKE SEMINOLE AT CHATTAHOOCHEE, FL

LOCATION.--Lat 30°42'29", long 84°51'56", in NE¼ sec. 31, T.4 N., R.6 W., Jackson County, Hydrologic Unit 03130004, near left bank in the control house of Jim Woodruff Dam on Chattahoochee River, 0.6 mi upstream from bridge on U.S. Highway 90, and 1.5 mi northwest of Chattahoochee.

SURFACE AREA.--37,500 acres (58.6 mi²), at elevation 77.0 ft NGVD, from data furnished by Corps of Engineers.

DRAINAGE AREA.--17,100 mi², approximately.

PERIOD OF RECORD.--July 1954 to September 1960 (monthend elevations and contents); October 1960 to current year (daily elevations and contents). Prior to October 1959, published as Jim Woodruff Reservoir at Chattahoochee.

REVISED RECORDS.--WSP 1554: 1955-57.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to July 22, 1957, nonrecording gage at same site at datum 53.96 ft higher. Prior to 1981, on right upstream lock wall at same datum.

REMARKS.--Reservoir is formed by earthfill dam with concrete fixed-crest spillway, a center channel spillway with 16 vertical lift gates 40 ft long and 20.5 ft high, and a side channel navigation lock 82 ft wide. Total capacity at elevation 77.0 ft, normal pool, is 367,320 acre-ft, of which 36,170 acre-ft between elevation 77.0 ft and 76.0 ft are used for pondage. Gates closed on May 20, 1954; filling of lake accomplished in several stages between that date and Feb. 4, 1957, when the pool first reached normal operating level, elevation 77.0 ft. Figures given herein represent total contents. Lake is used for navigation and power.

COOPERATION.--Daily and monthend elevations, furnished by Corps of Engineers, Mobile District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 433,300 acre-ft Apr. 7, 8, 1960, elevation, 78.66 ft; minimum contents after Feb. 4, 1957, 272,100 ft Nov. 27, 1978, elevation, 74.18 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 401,800 acre-ft, revised June 30, elevation, 77.89 ft; minimum contents, 342,400 acre-ft, revised, Aug. 1, elevation, 76.32 ft.

REVISIONS.--Revised figures of elevation and monthend elevation and contents for the water year 1983, superseding those published in the report for 1983 are given below.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	77.13	372,200	--
Oct. 31	76.79	359,500	-12,700
Nov. 30	76.92	364,300	+ 4,800
Dec. 31	77.49	386,000	+21,700
CAL YR 1982			- 7,800
Jan. 31	77.44	384,100	- 1,900
Feb. 28	77.30	378,700	- 5,400
Mar. 31	77.38	381,800	+ 3,100
Apr. 30	77.78	397,400	+15,600
May 31	77.11	371,500	-25,900
June 30	77.55	388,400	+16,900
July 31	76.51	349,300	-39,100
Aug. 31	76.80	359,900	+10,600
Sept. 30	77.30	378,700	+18,800
WTR YR 1983			+ 6,500

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02357500 LAKE SEMINOLE AT CHATTAHOOCHEE, FL--Continued

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77.17	76.69	77.07	77.43	77.49	77.25	77.46	77.77	77.25	77.59	76.44	76.89
2	77.25	76.74	77.30	77.43	77.73	77.33	77.35	77.70	77.49	77.69	76.63	77.21
3	76.99	76.89	77.55	77.23	77.69	77.51	77.49	77.61	77.55	77.68	76.85	77.29
4	76.76	77.18	77.68	77.36	77.66	77.62	77.62	77.68	77.59	77.09	77.07	77.03
5	76.93	77.35	77.66	77.54	77.78	77.56	77.65	77.69	77.20	77.09	77.28	76.83
6	77.12	77.43	77.73	77.52	77.65	77.55	77.48	77.68	76.84	77.40	77.24	76.93
7	77.23	77.15	77.70	77.60	77.56	77.56	77.39	77.65	77.03	77.61	77.05	77.03
8	77.35	76.98	77.70	77.72	77.63	77.65	77.49	77.49	77.35	77.65	76.89	77.12
9	77.40	77.11	77.71	77.57	77.45	77.51	77.48	77.35	77.56	77.70	77.20	77.34
10	77.13	77.24	77.67	77.24	77.31	77.65	77.60	77.42	77.70	77.38	77.46	77.42
11	76.90	77.32	77.59	77.26	77.53	77.82	77.77	77.61	77.78	77.04	77.58	77.18
12	77.02	77.38	77.62	77.39	77.61	77.59	77.64	77.56	77.53	77.13	77.75	77.02
13	77.13	77.41	77.60	77.32	77.46	77.38	77.57	77.53	77.25	77.42	77.72	77.29
14	77.29	77.02	77.58	77.49	77.32	77.32	77.69	77.61	77.36	77.64	77.43	77.51
15	77.36	76.79	77.55	77.69	77.50	77.51	77.64	77.36	77.54	77.67	77.12	77.65
16	77.41	76.81	77.65	77.45	77.55	77.51	77.64	77.17	77.62	77.70	77.31	77.73
17	77.17	76.86	77.70	77.39	77.56	77.39	77.69	77.51	77.74	76.28	77.44	77.75
18	76.90	76.85	77.62	77.50	77.68	77.38	77.74	77.67	77.75	76.90	77.51	77.47
19	77.02	76.87	77.37	77.52	77.61	77.62	77.59	77.59	77.31	76.94	77.54	77.31
20	77.13	76.95	77.16	77.59	77.56	77.49	77.45	77.68	76.90	77.02	77.48	77.43
21	77.22	76.72	77.47	77.52	77.26	77.62	77.38	77.68	76.97	77.10	77.12	77.51
22	77.33	76.57	77.42	77.62	77.25	77.51	77.57	77.63	77.12	77.20	76.78	77.55
23	77.34	76.72	77.35	77.74	77.38	77.32	77.57	77.75	77.36	77.29	76.85	77.54
24	77.04	76.94	77.58	77.67	77.51	77.50	77.51	77.63	77.63	76.97	76.96	77.45
25	76.73	77.19	77.67	77.62	77.55	77.62	77.45	77.49	77.83	76.65	77.19	77.10
26	76.76	77.17	77.40	77.58	77.57	77.67	77.58	77.56	77.75	76.72	77.38	76.84
27	76.86	77.15	77.22	77.56	77.44	77.61	77.41	77.63	77.54	76.87	77.47	76.96
28	77.01	76.85	77.49	77.66	77.16	77.65	77.29	77.65	77.68	76.99	77.05	77.09
29	77.22	76.67	77.63	77.60	---	77.73	77.44	77.25	77.82	77.08	76.67	77.18
30	77.30	76.79	77.77	77.38	---	77.57	77.80	76.87	77.69	77.07	76.67	77.24
31	76.97	---	77.61	77.27	---	77.28	---	77.04	---	76.71	76.74	---
TOTAL	2390.44	2309.79	2403.82	2402.46	2170.45	2403.28	2326.43	2403.51	2323.73	2393.27	2391.87	2317.89
MEAN	77.11	76.99	77.54	77.50	77.52	77.53	77.55	77.53	77.46	77.20	77.16	77.26
MAX	77.41	77.43	77.77	77.74	77.78	77.82	77.80	77.77	77.83	77.70	77.75	77.75
MIN	76.73	76.57	77.07	77.23	77.16	77.25	77.29	76.87	76.84	76.28	76.44	76.83

CAL YR 1982 TOTAL 28220.45 MEAN 77.32 MAX 77.94 MIN 76.09
WTR YR 1983 TOTAL 28236.94 MEAN 77.36 MAX 77.83 MIN 76.28

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02357500 LAKE SEMINOLE AT CHATTAHOOCHEE, FL

LOCATION.--Lat 30°42'29", long 84°51'56", in NE¼ sec. 31, T.4 N., R.6 W., Jackson County, Hydrologic Unit 03130004, near left bank in the control house of Jim Woodruff Dam on Chattahoochee River, 0.6 mi upstream from bridge on U.S. Highway 90, and 1.5 mi northwest of Chattahoochee.

SURFACE AREA.--37,500 acres (58.6 mi²), at elevation 77.0 ft NGVD, from data furnished by Corps of Engineers.

DRAINAGE AREA.--17,100 mi², approximately.

PERIOD OF RECORD.--July 1954 to September 1960 (monthend elevations and contents); October 1960 to current year (daily elevations and contents). Prior to October 1959, published as Jim Woodruff Reservoir at Chattahoochee.

REVISED RECORDS.--WSP 1554: 1955-57, WRD FL-83-4: 1983.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to July 22, 1957, nonrecording gage at same site at datum 53.96 ft higher. Prior to 1981, on right upstream lock wall at same datum.

REMARKS.--Reservoir is formed by earthfill dam with concrete fixed-crest spillway, a center channel spillway with 16 vertical lift gates 40 ft long and 20.5 ft high, and a side channel navigation lock 82 ft wide. Total capacity at elevation 77.0 ft, normal pool, is 367,320 acre-ft, of which 36,170 acre-ft between elevation 77.0 ft and 76.0 ft are used for pondage. Gates closed on May 20, 1954; filling of lake accomplished in several stages between that date and Feb. 4, 1957, when the pool first reached normal operating level, elevation 77.0 ft. Figures given herein represent total contents. Lake is used for navigation and power.

COOPERATION.--Daily and monthend elevations, furnished by Corps of Engineers, Mobile District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 433,300 acre-ft Apr. 7, 8, 1960, elevation, 78.66 ft; minimum contents after Feb. 4, 1957, 272,100 ft Nov. 27, 1978, elevation, 74.18 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 401,400 acre-ft, Aug. 11, elevation, 77.88 ft; minimum contents 310.700 acre-ft Nov. 15, elevation, 75.40 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	77.30	378,700	--
Oct. 31	76.70	356,200	-22,500
Nov. 30	77.22	395,000	+38,800
Dec. 31	77.59	389,900	- 5,100
CAL YR 1983			+ 3,900
Jan. 31	77.72	395,000	+ 5,100
Feb. 29	77.58	389,500	- 5,500
Mar. 31	77.56	388,700	- 800
Apr. 30	77.13	372,200	-16,500
May 31	77.67	393,100	+20,900
June 30	77.20	374,900	-18,200
July 31	77.37	381,400	+ 6,500
Aug. 31	77.17	373,700	- 7,700
Sept. 30	76.64	354,000	-19,700
WTR YR 1984			-24,700

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02357500 LAKE SEMINOLE AT CHATTAHOOCHEE, FL--Continued

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77.29	76.71	77.70	77.47	77.76	77.72	77.45	77.13	77.70	77.13	77.47	77.30
2	77.02	76.75	77.67	77.46	77.75	77.74	77.33	77.22	77.67	77.06	77.32	77.21
3	76.77	76.78	77.52	77.73	77.62	77.51	77.51	77.29	77.40	77.15	77.46	76.72
4	76.93	76.82	77.45	77.74	77.66	77.22	77.62	77.66	77.10	77.01	77.69	76.68
5	77.13	76.80	77.50	77.49	77.46	77.09	77.53	77.69	77.31	77.10	77.78	76.76
6	77.28	76.36	77.65	77.40	77.37	77.56	77.61	77.66	77.47	77.25	77.70	77.04
7	77.36	76.02	77.67	77.50	77.41	77.28	77.77	77.45	77.49	77.34	77.64	77.33
8	77.23	76.10	77.77	77.07	77.59	77.49	77.36	77.58	77.51	77.12	77.68	77.52
9	76.94	76.25	77.76	76.83	77.68	77.71	77.46	77.51	77.54	76.89	77.66	77.43
10	76.67	76.36	77.75	77.24	77.64	77.66	77.46	77.48	77.11	76.91	77.63	77.30
11	76.78	76.45	77.61	77.37	77.65	77.45	77.43	77.61	76.62	76.98	77.75	77.17
12	76.96	76.40	77.48	77.36	77.68	77.03	77.57	77.64	76.43	77.07	77.31	77.12
13	77.32	75.96	77.30	77.28	77.55	77.10	77.51	77.38	76.59	77.18	76.96	77.29
14	77.45	75.52	77.49	77.50	77.51	77.24	77.57	77.14	76.94	77.24	77.15	77.43
15	77.46	75.47	77.66	77.67	77.51	77.36	77.38	77.28	77.20	76.98	77.41	77.45
16	77.10	75.62	77.73	77.58	77.61	77.60	77.35	77.32	77.39	76.73	77.42	77.15
17	76.83	75.75	77.54	77.73	77.64	77.60	77.58	77.35	77.10	76.73	77.60	76.82
18	77.02	75.91	77.53	77.66	77.71	77.31	77.56	77.42	76.75	76.81	77.65	77.03
19	77.20	76.02	77.66	77.64	77.66	77.34	77.51	77.59	76.85	77.09	77.58	77.21
20	77.32	75.85	77.58	77.54	77.60	77.32	77.59	77.21	76.85	77.59	77.61	77.36
21	77.43	75.90	77.51	77.68	77.57	77.63	77.56	76.87	76.91	77.70	77.54	77.51
22	77.47	76.17	77.51	77.52	77.63	77.59	77.45	76.99	77.10	77.45	77.60	77.63
23	77.13	76.37	77.50	77.16	77.66	77.49	77.41	77.15	77.17	77.27	77.47	77.30
24	76.80	76.90	77.67	77.40	77.66	77.52	77.47	77.24	76.90	77.33	77.56	76.98
25	76.89	77.19	77.42	77.64	77.67	77.47	77.55	77.56	76.65	77.46	77.68	76.96
26	77.03	77.45	77.11	77.70	77.29	77.20	77.51	77.68	76.73	77.58	77.34	77.02
27	77.13	77.41	77.11	77.76	77.12	77.33	77.63	77.49	76.87	77.53	76.90	77.03
28	77.18	77.33	77.28	77.74	77.41	77.53	77.70	77.40	77.00	77.58	76.84	77.02
29	77.20	77.49	77.71	77.55	77.41	77.65	77.55	77.60	77.15	77.25	76.73	76.97
30	77.02	77.67	77.63	77.59	---	77.66	77.21	77.68	77.27	77.02	76.87	76.73
31	76.70	---	77.58	77.66	---	77.61	---	77.68	---	77.32	77.08	---
TOTAL	2390.04	2293.78	2404.05	2402.66	2249.48	2401.01	2325.19	2399.95	2312.77	2392.85	2400.08	2314.47
MEAN	77.10	76.46	77.55	77.51	77.57	77.45	77.51	77.42	77.09	77.19	77.42	77.15
MAX	77.47	77.67	77.77	77.76	77.76	77.74	77.77	77.69	77.70	77.70	77.78	77.63
MIN	76.67	75.47	77.11	76.83	77.12	77.03	77.21	76.87	76.43	76.73	76.73	76.68

CAL YR 1983 TOTAL 28220.76 MEAN 77.32 MAX 77.83 MIN 75.47
WTR YR 1984 TOTAL 28286.33 MEAN 77.29 MAX 77.78 MIN 75.47

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02358640 OCHEESEE POND NEAR SNEADS, FL

LOCATION.--Lat 30°41'32", long 84°58'21", in NW¼ sec.6, T.3 N., R.7 W., Jackson County, Hydrologic Unit 03130004, near north shore of lake, 1.8 mi southeast of Grand Ridge, and 4.2 mi west of Sneads.

SURFACE AREA.--2,230 acres (3.5 mi²).

DRAINAGE AREA.--24.2 mi².

PERIOD OF RECORD.--September and October 1979 (one observation each month); December 1979 to November 1980 (weekly); March 1981 to current year (fragmentary). Records of daily elevations, October 1948 to March 1950, furnished by Corps of Engineers are available in files of the Geological Survey.

GAGE.--Nonrecording gage. Datum of gage is 17.68 ft National Geodetic Vertical Datum of 1929. Since December 31, 1982, auxiliary nonrecording gage at site 300 ft north at datum 2.02 ft lower. Prior to May 21, 1981, nonrecording gage at different site at datum 89.68 ft higher. October 1948 to March 1950, nonrecording gage established by Corps of Engineers, at site on south shore of lake at datum 86.21 ft higher.

REMARKS.--Outflow from the lake is through two ditches below SR 280 at south end of lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 114.72 ft Mar. 6, 1984, furnished by local resident; minimum observed, 105.62 ft Oct. 13, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation observed, 117.97 ft Oct. 22, 1948, furnished by Corps of Engineers.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	TEMPERATURE (DEG C)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	TEMPERATURE (DEG C)
DEC				JUN			
28...	1100	108.60	--	26...	1425	112.04	31.0
MAR				AUG			
01...	1405	112.46	15.0	24...	0745	111.56	28.5
06...	--	114.72	--				
MAY							
21...	1428	112.76	29.0				

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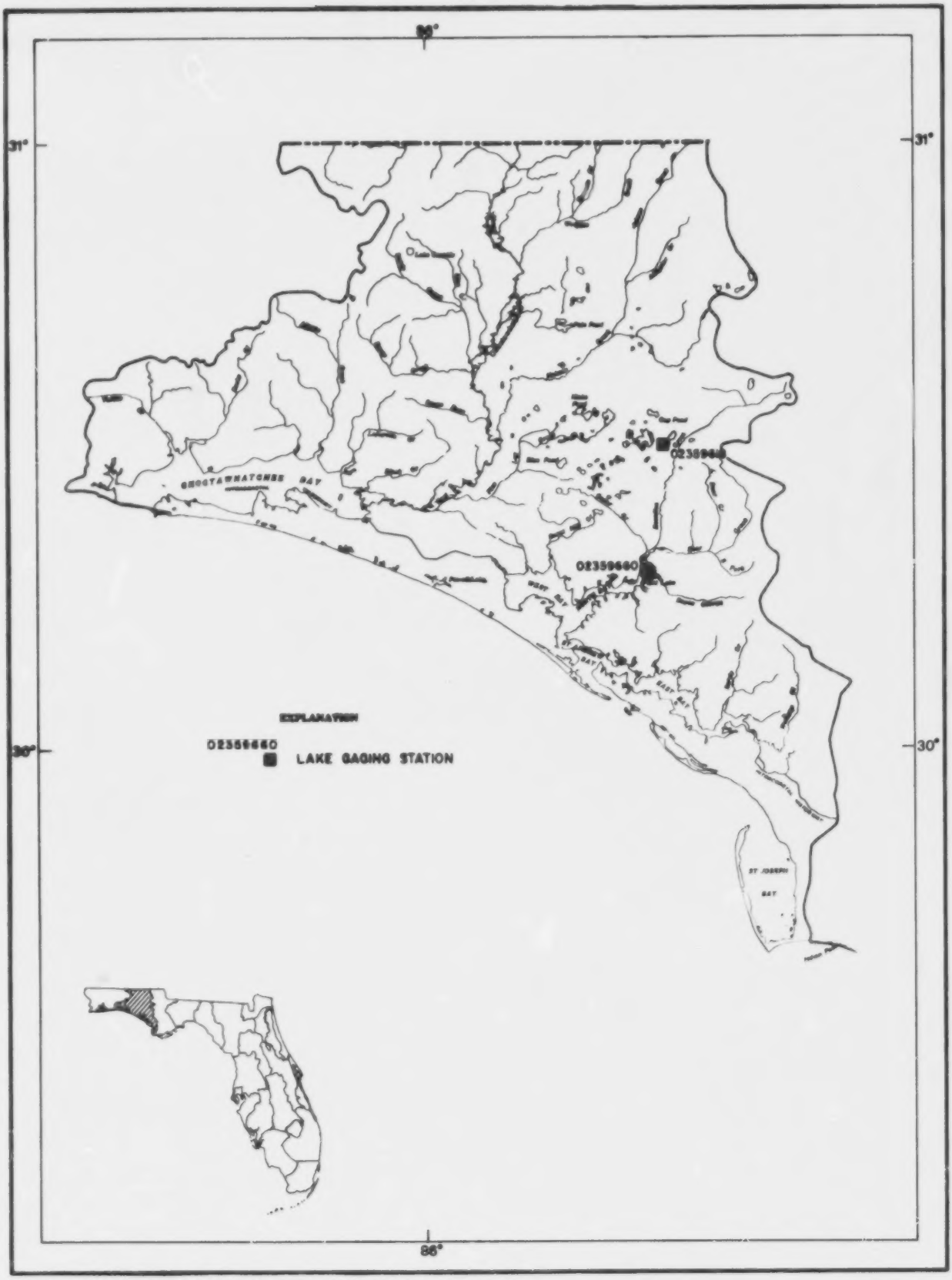

Figure 13. Location of lake gaging stations in the Econfina Creek basin.

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02359618 PORTER LAKE NEAR GREENHEAD, FL

LOCATION.--Lat 30°29'50", long 85°33'05", in SW¼ sec.9, T.1 N., R.13 W., Washington County, Hydrologic Unit 03140101, on west shore near southwest end of lake, 6.6 mi east of Greenhead.

SURFACE AREA.--929 acres (1.45 mi²) at elevation 70 ft NGVD.

DRAINAGE AREA.--7.64 mi².

PERIOD OF RECORD.--January 1961 to September 1970 (weekly), incomplete; October 1970 to current year (periodically).

GAGE.--Nonrecording gage. Datum of gage is 52.27 ft National Geodetic Vertical Datum of 1929. Gage readings have been reduced to elevations NGVD.

REMARKS.--Lake is in a closed basin of lakes and ponds, fed by White Oak Creek, in the western part of Econfina Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 75.37 ft Mar. 26, 1984; minimum observed, 53.22 ft Dec. 8, 1969.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	TEMPERATURE (DEG C)	ELEVATION ABOVE NGVD (FEET)
OCT			
04...	0755	24.0	70.67
25...	1015	--	70.15
NOV			
18...	0840	--	69.34
20...	1455	--	69.37
DEC			
28...	1515	--	69.87
JAN			
11...	1450	--	69.89
24...	1023	--	69.89
FEB			
24...	1240	--	70.95
29...	1233	13.0	71.01
MAR			
26...	1135	--	75.37
MAY			
09...	1300	25.0	72.63
JUN			
25...	1100	--	72.69
JUL			
09...	1300	--	72.82
25...	1120	--	72.97
AUG			
21...	0930	29.0	72.91
21...	1356	--	72.91
SEP			
24...	1205	--	72.37

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02359660 DEER POINT LAKE NEAR PANAMA CITY, FLA.

LOCATION.--Lat. 30°17'57", long 85°34'50", in SE¼ sec.19, T.2 S., R.13 W., Bay County, Hydrologic Unit 03140101, on east shore of lake, on private dock 0.3 mi north of public boat landing, 2.4 mi north of Deer Point Dam, and 10 mi northeast of Panama City.

SURFACE AREA.--4,698 acres, 7.34 mi², at elevation 4.3 ft NGVD.

DRAINAGE AREA.--435 mi², of which 43.9 mi² is noncontributing.

PERIOD OF RECORD.--November 1961 to September 1962 (fragmentary); October 1962 to October 1978 (once daily); November to December 1978 (weekly); January to June 1979 (once daily); July 1979 to January 1981 (weekly); February 1981 to current year (once daily).

REVISED RECORD.--WRD FL-78-4: 1962-77.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to June 4, 1965 at site 0.3 mi south at datum then in use.

REMARKS.--Lake is formed by fixed concrete-capped sheet-pile dam with underpass tube and valve; crest of dam is at elevation 4.3 ft. Dam was completed on Nov. 17, 1961, and was filled to normal elevation of 4.6 ft Dec. 2, 1961.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 7.67 ft July 31, 1975, from high-water mark; minimum elevation, 1.2 ft estimated, Jan. 6, 1981, (caused by drawdown of lake level); prior to Jan. 6, 1981, minimum observed, 4.46 ft Oct. 14, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum elevation observed, 7.17 ft Apr. 4; minimum observed, 4.72 ft many days during the year.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
ONCE DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.78	4.80	4.88	4.98	4.96	5.10	4.96	4.82	4.78	5.04	5.42	4.92
2	4.76	4.78	4.84	4.92	4.94	4.98	4.88	4.82	4.78	5.06	4.84	4.90
3	4.78	4.76	4.80	4.84	4.92	4.96	6.42	4.84	4.76	5.10	4.92	4.92
4	4.76	4.78	4.82	4.88	4.90	4.94	7.17	4.86	4.74	5.26	5.18	4.94
5	4.78	4.76	4.86	4.86	5.04	4.92	6.28	4.88	4.74	5.14	5.14	4.94
6	4.76	4.80	5.06	4.84	5.26	6.92	5.48	4.86	4.72	5.10	5.02	4.92
7	4.76	4.78	5.04	4.82	5.00	6.18	5.08	4.84	4.72	5.08	5.02	4.90
8	4.74	4.76	5.00	4.84	4.94	5.58	5.06	4.82	4.74	5.10	5.00	4.86
9	4.76	4.74	4.94	4.88	4.96	5.46	5.08	4.84	4.76	5.08	4.98	4.88
10	4.76	4.76	4.92	4.92	4.94	5.20	5.10	4.82	4.74	5.08	4.96	4.86
11	4.78	4.78	4.98	4.86	4.92	5.16	5.12	4.80	4.76	5.06	4.94	4.84
12	4.80	4.78	5.34	4.88	4.94	5.00	5.10	4.82	4.74	5.04	4.94	4.82
13	4.82	4.76	5.38	4.84	4.98	4.96	5.08	4.82	4.74	5.02	4.92	4.84
14	4.82	4.74	5.34	4.80	4.96	4.98	5.06	4.82	4.76	5.06	4.88	4.86
15	4.80	4.72	5.26	4.82	4.94	4.96	5.04	4.80	4.78	5.10	4.86	4.84
16	4.78	4.72	5.04	4.84	4.92	4.94	5.02	4.80	4.78	5.12	4.84	4.82
17	4.76	4.74	4.96	4.86	4.90	4.92	4.96	4.78	4.82	5.14	4.86	4.84
18	4.74	4.76	4.90	4.90	4.88	4.90	4.88	4.78	4.84	5.16	4.88	4.82
19	4.76	4.78	4.84	4.99	4.90	4.88	4.86	4.76	4.86	5.18	4.90	4.80
20	4.78	4.78	4.82	5.04	4.88	4.94	4.84	4.76	4.88	5.22	4.96	4.80
21	4.78	4.86	4.84	5.00	4.90	4.92	4.84	4.78	4.90	5.28	4.98	4.82
22	4.80	4.88	4.84	5.02	4.94	4.96	4.88	4.80	4.92	5.26	4.96	4.80
23	4.82	4.90	4.82	5.00	4.96	4.98	4.86	4.78	4.92	5.24	4.94	4.78
24	4.80	4.92	4.84	4.98	4.92	4.96	4.88	4.78	4.90	5.24	4.96	4.76
25	4.80	4.96	4.82	4.96	4.90	4.94	4.90	4.76	4.92	5.10	4.98	4.78
26	4.78	4.96	4.84	5.04	4.92	4.96	4.88	4.74	4.94	5.02	5.02	4.76
27	4.76	4.98	4.86	5.04	5.16	5.14	4.90	4.76	4.96	4.96	5.08	4.74
28	4.78	5.02	4.88	5.06	5.20	5.26	4.88	4.76	5.00	4.90	5.10	4.72
29	4.76	4.98	4.96	5.02	5.24	5.24	4.86	4.74	5.02	5.16	5.06	4.74
30	4.76	4.92	5.02	5.00	---	5.12	4.84	4.74	5.02	5.28	4.98	4.76
31	4.78	---	5.00	4.98	---	5.06	---	4.76	---	5.54	4.96	---
TOTAL	148.10	144.66	153.74	152.71	144.22	159.42	154.19	148.74	144.94	159.12	154.48	144.98
MEAN	4.78	4.82	4.96	4.93	4.97	5.14	5.14	4.80	4.83	5.13	4.98	4.83
MAX	4.82	5.02	5.38	5.06	5.26	6.92	7.17	4.88	5.02	5.54	5.42	4.94
MIN	4.74	4.72	4.80	4.80	4.88	4.88	4.84	4.74	4.72	4.90	4.84	4.72

WTR YR 1984 TOTAL 1809.30 MEAN 4.94 MAX 7.17 MIN 4.72

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WELL DESCRIPTIONS AND GROUND-WATER DATA

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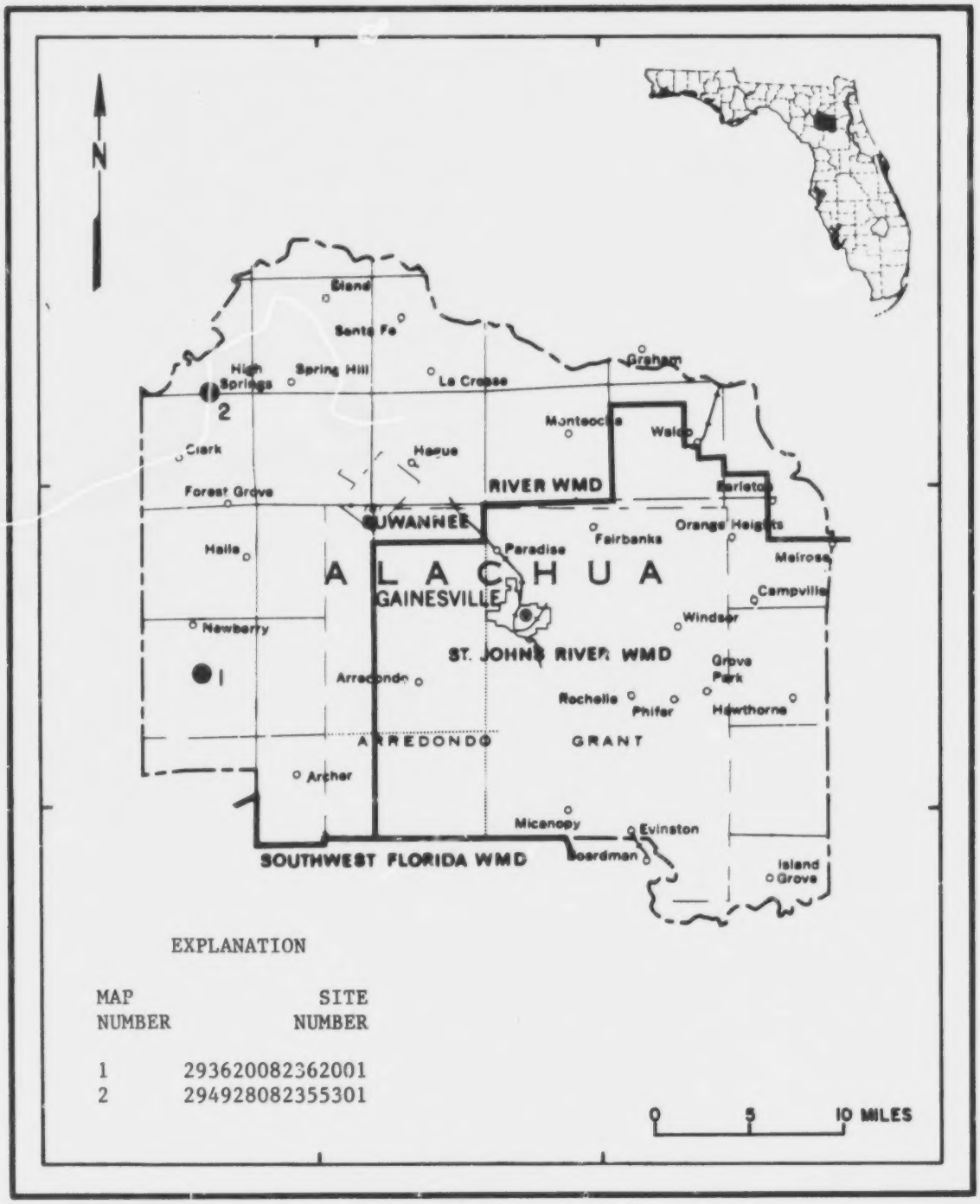

Figure 14. Location of wells in Alachua County

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ALACHUA COUNTY

WELL NUMBER.--293620082362001. USGS Observation Well near Newberry, FL.

LOCATION.--Lat 29°36'20", long 82°36'20", in NW¼SW¼NW¼ sec.22, T.10 S., R.17 E., Hydrologic Unit 03110101, 3.0 mi south of Newberry and 6.5 mi north of Archer.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 8 in., depth 252 ft, cased to 136 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 4.00 ft above land-surface datum.

DATUM.--Land-surface datum is 72.27 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 54.63 ft NGVD, Oct. 7, 1965; lowest, 38.00 ft NGVD, Jan. 15, 1982.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	47.42	47.45	47.11	47.32	47.82	47.76	47.93	48.41	48.25	47.89	48.16	48.37
10	47.46	47.40	47.05	47.50	47.78	47.75	48.10	48.40	48.18	47.84	48.31	48.32
15	47.49	47.31	47.04	47.57	47.79	47.77	48.22	48.38	48.10	47.78	48.34	48.20
20	47.52	47.23	47.01	47.65	47.77	47.86	48.28	48.30	48.06	47.77	48.37	48.08
25	47.52	47.19	46.96	47.74	47.74	47.86	48.35	48.23	48.00	47.79	48.36	47.93
EOM	47.46	47.14	47.01	47.78	47.71	47.84	48.38	48.26	47.92	47.88	48.41	---
MEAN	47.47	47.30	47.04	47.55	47.78	47.80	48.17	48.34	48.11	47.82	48.30	48.20
MAX	47.54	47.45	47.14	47.79	47.84	47.92	48.38	48.44	48.27	47.90	48.42	48.41
MIN	47.36	47.14	46.95	47.08	47.71	47.70	47.84	48.23	47.92	47.76	47.93	47.91

WTR YR 1984 MEAN 47.82 MAX 48.44 MAY 3 AND OTHERS MIN 46.95 DEC 26 AND OTHERS

WELL NUMBER.--294928082355301. City of High Springs Well at High Springs, FL.

LOCATION.--Lat 29°49'28", long 82°35'53", in NE¼SW¼NE¼ sec.3, T.8 S., R.17 E., Hydrologic Unit 03110206, 200 ft southwest of post office and 0.2 mi south of City Hall at High Springs.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 10 in., depth 300 ft, cased to 250 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Bottom of 1¼ in. riser pipe, 1.00 ft above land-surface datum.

DATUM.--Land-surface datum is 72.40 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June to September 1970 (bimonthly); September 1970 to September 1979; October 1979 to September 1980 (bimonthly); October 1980 to current year. Records prior to January 1974 are available in files of the Geological Survey. (Discontinued.)

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 43.42 ft NGVD, Sept. 17, 1964; lowest, 28.07 ft NGVD, May 6, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.33	35.10	35.25	38.08		37.28		36.34	---	36.93	36.03	35.65
10	35.24	35.08	35.20	37.00		---		36.16	35.62	36.93	35.89	35.59
15	35.18	35.04	35.31	36.28		---		36.21	35.59	36.94	35.77	35.52
20	35.18	35.11	35.58	---		---		35.89	35.54	36.94	35.71	35.49
25	35.16	35.16	35.53	---		---		35.79	35.55	36.86	35.67	35.43
EOM	35.11	35.28	36.20	---		---		35.77	35.48	36.63	35.71	---
MEAN	35.22	35.10	35.42	37.11		37.20		36.03	35.60	36.89	35.80	35.55
MAX	35.46	35.28	36.20	38.08		37.40		36.56	35.77	36.95	36.03	35.70
MIN	35.11	35.01	35.20	36.16		36.95		35.77	35.47	36.63	35.67	35.42

WTR YR 1984 MEAN 35.84 MAX 38.08 JAN 5 MIN 35.01 NOV 18

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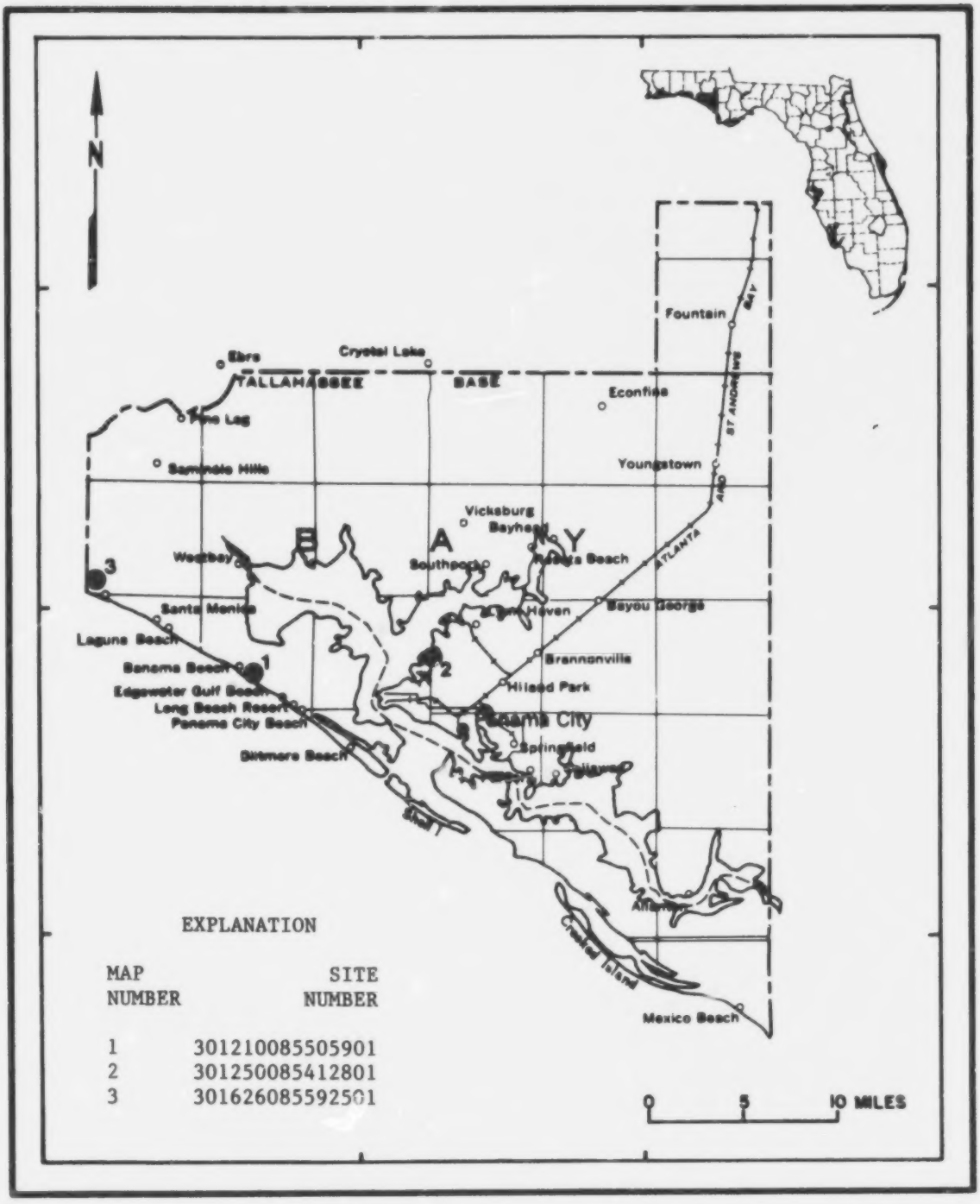

Figure 15. Location of wells in Bay County

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BAY COUNTY

WELL NUMBER.--301210085505901. West Panama City Beach Well at West Panama City Beach, FL.

LOCATION.--Lat 30°12'10", long 85°50'59", in SW¼NE¼NE¼ sec.28, T.3 S., R.16 W., Hydrologic Unit 03140101, about 100 ft west of State Highway 30J and 0.2 mi north of U.S. Highway 98 at Panama City Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 6 in., depth 590 ft, cased to 306 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of extended casing, 5.34 ft above land-surface datum.

DATUM.--Land-surface datum is 28.52 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--February 1962 to July 1965; January 1966 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.99 ft NGVD, May 14, 1973; lowest measured, -14.67 ft NGVD, Sept. 1, 1970.

ELEVATION, IN FEET, NGVD, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
17...	0825	3.45	09...	1905	4.72
JAN			JUN		
11...	0850	3.83	25...	1235	3.74
FEB			AUG		
29...	0720	4.06	20...	1310	3.26

WELL NUMBER.--301250085412801. Panama City Airport Authority Well, near Panama City, FL.

LOCATION.--Lat 30°12'50", long 85°41'28", in NW¼SW¼NW¼ sec.19, T.3 S., R.14 W., Hydrologic Unit 03140101, 200 ft north of Frankford Ave., 1.4 mi north of State Highway 390 and 3.6 mi northwest of Panama City.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 6 in, depth 345 ft, cased to 326 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 1.50 ft above land-surface datum. Prior to September 1965 water-level recorder at same site and datum.

DATUM.--Land-surface datum is 4.03 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--February 1962 to September 1965; March 1966 to December 1968 (monthly); January 1969 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.84 ft NGVD, Mar. 6, 1969; lowest measured, -6.88 ft NGVD, June 9, 1975.

ELEVATION, IN FEET, NGVD, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
16...	1540	0.99	10...	0725	-1.44
JAN			JUN		
11...	0800	0.64	25...	1205	-3.27
FEB			AUG		
29...	0800	1.29	21...	1240	-2.46

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BAY COUNTY

WELL NUMBER.--301626085592501. Avondale Mills Well near Panama City, FL.

LOCATION.--Lat 30°16'26", long 85°59'25", in NW¼NE¼SW¼ sec.31, T.2 S., R.17 W., Hydrologic Unit 03140101, at Camp Helen, 0.4 mi east of Walton - Bay county line and 6.1 mi northwest of Panama City Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 8 in., depth 482 ft, casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of airline hole, 1.95 ft above land-surface datum.

DATUM.--Land-surface datum is 22.13 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--December 1961 to December 1963 (monthly); October 1968 to September 1970 (bimonthly); July 1974 (annually); March 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.07 ft NGVD, Feb. 19, 1963; lowest measured, -3.65 ft NGVD, September 11, 1984.

ELEVATION, IN FEET, NGVD, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
17...	0920	3.58	09...	1840	-1.60
JAN			JUL		
11...	0916	5.08	13...	1215	-3.20
FEB			SEP		
29...	0650	5.88	11...	1150	-3.65

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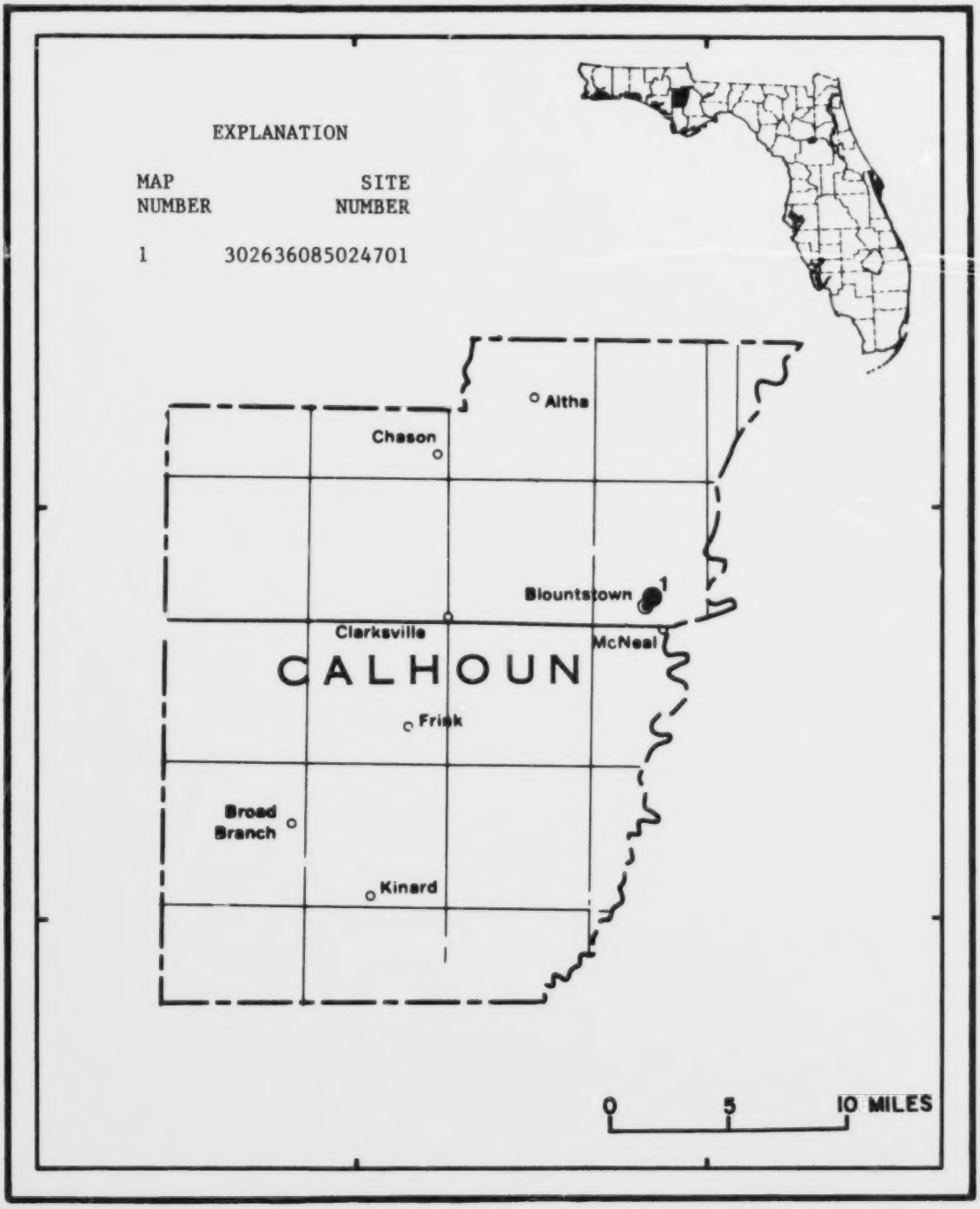

Figure 16. Location of wells in Calhoun County

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CALHOUN COUNTY

WELL NUMBER.--302636085024701. City of Blountstown Well at Blountstown, FL.

LOCATION.--Lat 30°26'36", long 85°02'47", in SE¼NW¼NW¼ sec.33, T.1 N., R.8 W., Hydrologic Unit 03130011, at City Hall Building in Blountstown.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, public-supply, artesian well, diameter 6 in., depth 212 ft, cased to 36 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of hole in cap at land-surface datum.

DATUM.--Land-surface datum is 58.94 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June to November 1961 (monthly); January 1962 to July 1964 (bimonthly); January 1965 to June 1977 (semiannually); November 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 58.54 ft NGVD, Jan. 14, 1966; lowest measured, 45.37 ft NGVD, July 22, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			MAY		
14...	1120	50.60	08...	1220	52.14
JAN			JUN		
09...	0920	51.67	20...	1030	51.76
MAR			AUG		
02...	1015	53.49	22...	0730	52.32

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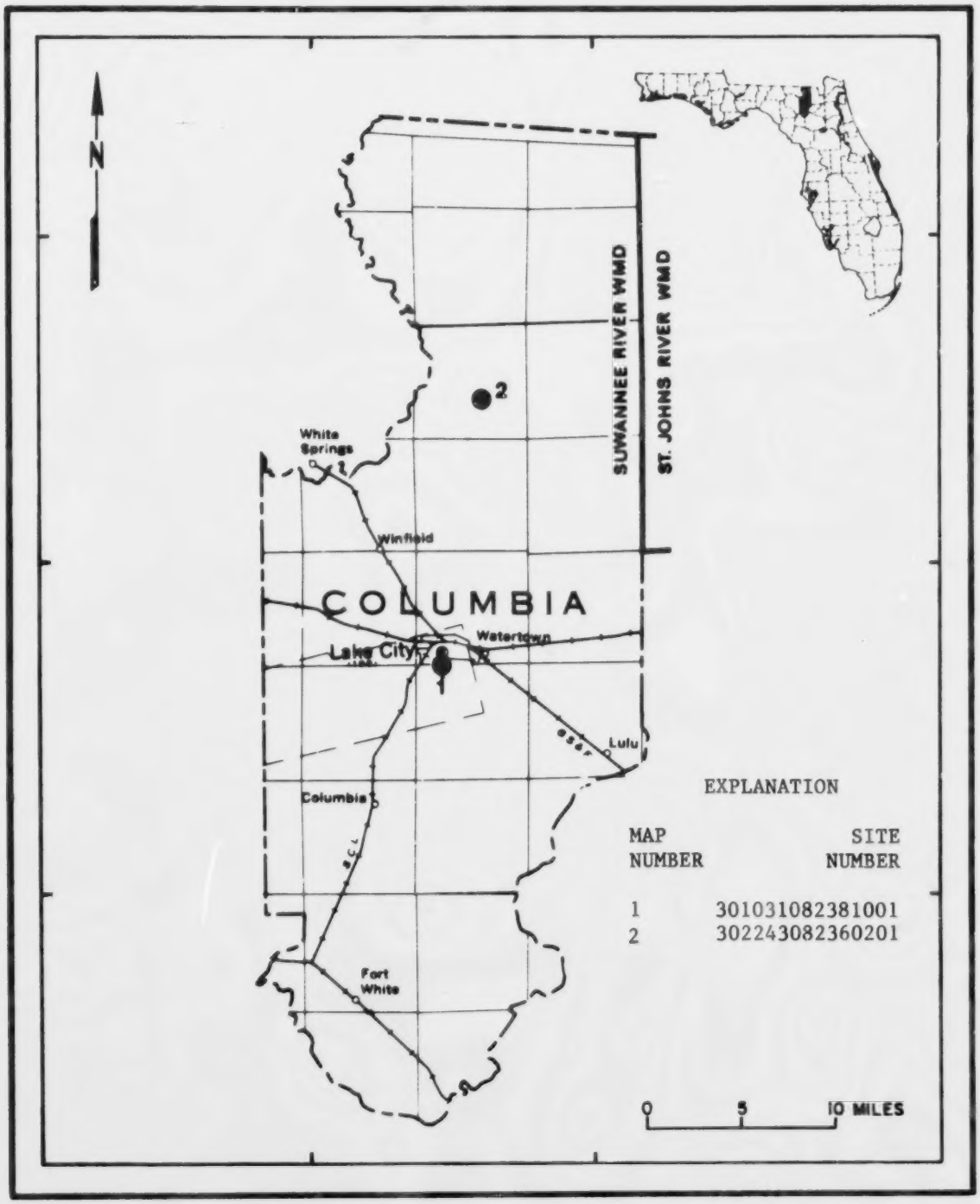

Figure 17. Location of wells in Columbia County

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COLUMBIA COUNTY

WELL NUMBER.--301031082391001. Local Number Columbia 9. City of Lake City Well at Lake City, FL.

LOCATION.--Lat 30°10'31", long 82°38'10", in SE¼NE¼NW¼ sec.5, T.4 S., R.17 E., Hydrologic Unit 03110206, 0.1 mi east of U.S. Highway 441 and 1.0 mi south of intersection of U.S. Highway 441 and U.S. Highway 90 at Lake City.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 12 in., depth 836 ft, cased to 680 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top edge shelter floor, 1.05 ft above land-surface datum.

DATUM.--Land-surface datum is 143.64 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1942 (annually); June 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 64.11 ft NGVD, June 4, 1948; lowest, 46.14 ft NGVD, Jan. 5, 1982.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	51.71	51.32	50.96	51.03	51.57	52.07	53.52	55.33	55.74	55.05	54.37	53.98
10	51.60	51.37	50.77	51.24	51.33	52.04	53.84	55.48	55.61	54.87	54.37	53.88
15	51.51	51.25	50.97	51.00	51.55	52.16	54.28	55.65	55.49	54.71	---	53.73
20	51.50	51.29	50.80	51.07	51.69	52.73	54.37	55.72	55.40	54.70	---	53.63
25	51.48	51.13	50.62	51.31	51.76	52.83	54.71	55.79	55.43	54.59	---	53.40
EOM	51.14	50.91	50.64	51.36	51.85	53.06	54.92	55.82	55.23	54.50	53.99	53.64
MEAN	51.51	51.17	50.88	51.09	51.61	52.44	54.13	55.59	55.52	54.78	54.31	53.67
MAX	51.72	51.37	51.14	51.46	52.12	53.53	54.92	55.89	55.79	55.27	54.45	53.96
MIN	51.14	50.91	50.62	50.64	51.21	51.80	53.08	55.04	55.23	54.50	53.99	53.38

WTR YR 1984 MEAN 53.00 MAX 55.89 MAY 30 MIN 50.62 DEC 25 AND OTHERS

WELL NUMBER.--302243082360201. Local Number ONF No. 1 Floridan. USGS Observation Well near Benton, FL.

LOCATION.--Lat 30°22'43", long 82°36'02", NE¼NW¼NW¼ sec.11, T.1 S., R.17 E., Hydrologic Unit 03110201, 0.4 mi south of intersection of jeep trail and U.S. Forest Road 285 in Osceola National Forest, 1.6 mi east of intersection of U.S. Forest Road 285 and U.S. Highway 441, and 12 mi north of Lake City.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 8 in, depth 228 ft, cased to 194 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top edge of shelter floor, 2.4 ft above land-surface datum.

DATUM.--Land-surface datum is 119.66 ft National Geodetic Vertical Datum of 1929 (levels by L.L. Lee and Associates).

PERIOD OF RECORD.--June 1976 to current year. (Discontinued.)

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 64.57 ft NGVD, Apr. 18, 1983; lowest, 49.33 ft NGVD, Aug. 22, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	54.43	54.04	53.86	58.38	57.97	59.62	---	62.70	57.55	56.15	57.35	55.13
10	54.24	54.07	53.55	58.40	58.63	61.18	---	60.71	57.08	56.45	56.62	55.00
15	54.20	53.96	54.05	57.58	59.34	64.67	---	59.62	56.74	55.88	55.97	54.75
20	54.19	54.00	54.55	57.07	59.20	65.91	---	58.90	56.38	56.53	55.64	54.60
25	54.12	53.90	54.82	56.82	58.68	66.03	---	58.34	56.18	56.93	55.45	54.33
EOM	53.88	53.81	56.81	57.04	58.82	67.40	---	57.98	55.95	57.16	55.37	---
MEAN	54.21	53.93	54.43	57.51	58.62	63.67	68.02	59.91	56.78	56.44	56.21	54.75
MAX	54.43	54.07	56.81	58.50	59.37	67.40	68.33	64.01	57.90	57.16	57.37	55.33
MIN	53.88	53.75	53.55	56.77	57.10	58.95	67.65	57.98	55.95	55.78	55.37	54.31

WTR YR 1984 MEAN 57.09 MAX 68.33 APR 4 MIN 53.55 DEC 10

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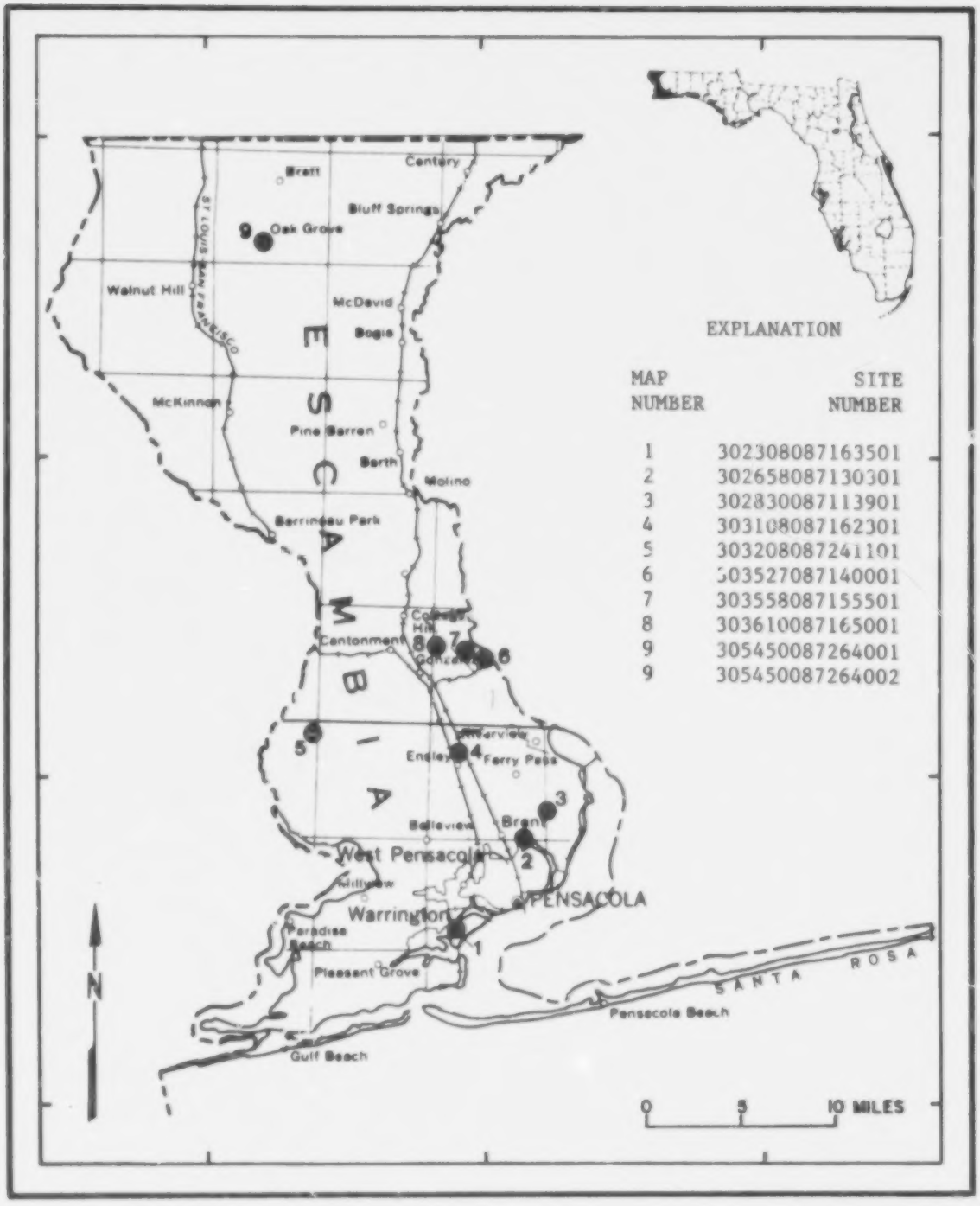

Figure 18. Location of wells in Escambia County

ESCAMBIA COUNTY

WELL NUMBER.--302308087163501. Local number 39. Irving B. Hanna Well at Warrington, FL.

LOCATION.--Lat 30°23'08", long 87°16'35", in land grant 51, T.2 S., R.30 W., Hydrologic Unit 03140105, 45 ft north of East Winthrop Avenue and 140 ft east of First Street at Warrington.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 3 in., depth 244 ft, cased to 92 ft, screened 92 to 99 ft, 156 to 170 ft, and 232 to 244 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of coupling, 1.0 ft above land-surface datum.

DATUM.--Land-surface datum is 9.91 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1940 to October 1962 (weekly); October 1962 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.05 ft NGVD, Aug. 13, 1940; lowest measured, -8.35 ft NGVD, Aug. 5, 1968.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			APR		
17...	1100	0.99	09...	1010	2.41
NOV			MAY		
14...	1005	1.21	14...	1530	-0.77
DEC			JUN		
05...	1345	2.32	18...	0955	-1.02
JAN			JUL		
09...	1245	1.74	09...	1315	-1.08
FEB			AUG		
13...	1410	2.27	20...	1245	1.39
MAR			SEP		
19...	1340	2.26	10...	1245	0.81

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ESCAMBIA COUNTY

WELL NUMBER.--302658087130301. Local number 026-713-5. USGS Observation Well at Pensacola, FL.

LOCATION.--Lat 30°26'58", long 87°13'03", i land grant 4, T.2 S., R.30 W., Hydrologic Unit 03140105, 33 ft west of State Highway 291 (Alcaniz Street) and 0.3 mi south of State Highway 289 (Fairfield Drive) at Pensacola.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 149 ft, cased to 144 ft, screened from 144 to 149 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of plug, 2.71 ft above land-surface datum.

DATUM.--Land-surface datum is 89.41 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1959 to July 1962; October 1962 to current year (weekly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.69 ft NGVD, Oct. 29, 1979; lowest measured, 19.33 ft (5.89 m) NGVD, Feb. 19, 1973.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	29.84	---	---	30.03	---	---	29.43	---	---
3	30.38	---	---	---	---	---	---	---	---	---	---	29.61
4	---	---	---	---	---	---	---	---	29.17	---	---	---
5	---	---	30.37	---	---	30.00	---	---	---	---	---	---
6	---	---	---	---	29.84	---	---	---	---	---	29.56	---
7	---	30.33	---	---	---	---	---	29.99	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	29.94	---	---	30.45	---	---	28.69	---	---
10	30.44	---	---	---	---	---	---	---	---	---	---	29.58
11	---	---	---	---	---	---	---	---	28.91	---	---	---
12	---	---	30.24	---	---	30.03	---	---	---	---	---	---
13	---	---	---	---	29.91	---	---	---	---	---	---	---
14	---	30.41	---	---	---	---	---	29.39	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	30.01	---	---	30.25	---	---	29.06	---	---
17	30.41	---	---	---	---	---	---	---	---	---	---	29.71
18	---	---	---	---	---	---	---	---	29.34	---	---	---
19	---	---	30.12	---	---	30.02	---	---	---	---	---	---
20	---	---	---	---	29.90	---	---	---	---	---	30.00	---
21	---	30.37	---	---	---	---	---	29.75	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	29.92	---	---	30.22	---	---	28.95	---	---
24	30.97	---	---	---	---	---	---	---	---	---	---	29.64
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	29.45	---	---	30.09	---	---	---	---	---	---
27	---	---	---	---	29.97	---	---	27.79	---	---	30.03	---
28	---	30.40	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	29.94	---	---	30.08	---	---	29.25	---	---
31	30.41	---	---	---	---	---	---	---	---	---	---	---

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ESCAMBIA COUNTY

WELL NUMBER.--302830087113901. Pensacola Airport Well at Pensacola, FL.

LOCATION.--Lat 30°28'30", long 87°11'39", in NW¼NE¼SW¼ sec.*, T.1 S., R.29 W., Hydrologic Unit 03140105, 160 ft southwest of Pensacola Airport terminal building at Pensacola.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, 120 NFSG.

WELL CHRACTERISTICS.--Drilled, unused, irrigation well, diameter 10 in., depth 210 ft, cased 163 ft, screened from 163 to 210 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 1.0 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 110 ft, from topographic map.

REMARKS.--*Land is not sectionized in this area.

PERIOD OF RECORD.--July 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 33.01 ft NGVD, May 25, 1980; lowest, 15.70 ft NGVD, Jan. 17, 1982.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	25.86	25.96	25.27	24.41	23.59	23.22	23.54	23.68	22.81	21.74	21.43	21.87
10	25.84	25.78	25.22	24.44	23.46	23.03	23.69	23.68	22.54	21.45	21.58	21.79
15	25.91	25.59	25.00	24.09	23.27	23.12	23.72	23.57	22.46	21.39	21.65	21.61
20	25.92	25.72	24.90	23.80	23.27	23.50	23.69	23.25	22.19	21.42	21.71	21.54
25	25.87	25.20	24.77	23.87	23.15	23.36	23.70	23.25	22.18	21.29	21.85	21.34
EOM	25.85	25.20	24.40	23.58	23.00	23.31	23.74	23.05	21.92	21.24	21.86	21.15
MEAN	25.89	25.57	25.04	24.04	23.38	23.21	23.70	23.46	22.43	21.45	21.66	21.59
MAX	26.01	26.01	25.44	24.44	23.78	23.62	23.85	23.94	22.98	21.86	21.92	21.90
MIN	25.78	25.20	24.29	23.58	23.00	22.84	23.36	23.05	21.92	21.21	21.22	21.15

WTR YR 1984 MEAN 23.45 MAX 26.01 OCT 23 AND OTHERS MIN 21.15 SEP 30

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ESCAMBIA COUNTY

WELL NUMBER.--303108087162301. Local number 45. USGS Observation Well at Ensley, FL.

LOCATION.--Lat 30°31'08", long 87°16'23", in SE¼SE¼SW¼ sec.11, T.1 S., R.30 W., Hydrologic Unit 03140107, 24 ft west of Pensacola Boulevard, (U.S. Highway 29), 175 ft north of Detroit Boulevard and 0.4 mi west of State Highway 95A, (Old Palafox Highway), in Ensley.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in, depth 239 ft, cased to 229 ft, screened from 229 to 239 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of flange cover, 1.10 ft above land-surface datum.

DATUM.--Land-surface datum is 131.52 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--December 1939 to June 1940 (weekly); June 1940 to May 1955; January 1955 to current year (weekly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 75.07 ft NGVD, Sept. 23, 1948; lowest measured, 48.27 ft NGVD, Nov. 27, 1972.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	53.35	53.75	---	54.65	---	---	54.13	---	---
3	54.02	---	---	---	---	---	---	---	---	---	---	54.02
4	---	---	---	---	---	---	---	---	53.41	---	---	---
5	---	---	54.05	---	---	54.42	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	54.12	---
7	---	54.45	---	---	---	---	---	54.44	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	53.77	---	---	55.07	---	---	54.33	---	---
10	54.20	---	---	---	---	---	---	---	---	---	---	54.29
11	---	---	---	---	---	---	---	---	52.74	---	---	---
12	---	---	54.19	---	---	54.23	---	---	---	---	---	---
13	---	---	---	---	54.04	---	---	---	---	---	---	---
14	---	54.39	---	---	---	---	---	52.75	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	53.82	---	---	55.02	---	---	54.33	---	---
17	54.21	---	---	---	---	---	---	---	---	---	---	54.15
18	---	---	---	---	---	---	---	---	54.23	---	---	---
19	---	---	53.96	---	---	54.57	---	---	---	---	---	---
20	---	---	---	---	54.08	---	---	---	---	---	54.22	---
21	---	54.09	---	---	---	---	---	53.95	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	53.65	---	---	55.19	---	---	54.19	---	---
24	54.30	---	---	---	---	---	---	---	---	---	---	54.14
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	53.50	---	---	54.73	---	---	---	---	---	---
27	---	---	---	---	54.46	---	---	52.18	---	---	54.10	---
28	---	54.06	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	53.89	---	---	55.09	---	---	54.15	---	---
31	54.07	---	---	---	---	---	---	---	---	---	---	---

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ESCAMBIA COUNTY

WELL NUMBER.--303208087241101. Local number 032-724-1. USGS Observation Well near Ensley, FL.

LOCATION.--Lat 30°32'08", long 87°24'11", in NW¼NW¼NE¼ sec.12, T.1 S., R.32 W., Hydrologic Unit 03140106, 0.3 mi east of intersection of U.S. Highway 90 and U.S. Highway 90 Alternate, 2.8 mi east of Perdido River, and 8 mi west of Ensley.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 170 ft, cased to 165 ft, screened from 165 to 170 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of plug, 2.9 ft above land-surface datum.

DATUM.--Land-surface datum is 123.43 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1958 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.83 ft NGVD, July 8, 1959; lowest measured 28.30 ft NGVD, Dec. 7, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			APR		
17...	0825	31.22	09...	0755	32.04
NOV			MAY		
14...	0740	31.11	14...	1255	31.40
DEC			JUN		
05...	1140	31.10	18...	0740	30.85
JAN			JUL		
09...	1015	31.23	09...	1035	30.65
FEB			AUG		
13...	1200	31.56	20...	1005	31.12
MAR			SEP		
19...	1135	31.73	10...	0950	30.93

WELL NUMBER.--303527087140001. Local number 83. Monsanto Company Well near Cantonment, FL.

LOCATION.--Lat 30°35'27", long 87°14'00", in land grant 30, T.1 N., R.30 W., Hydrologic Unit 03140305, on south bank of Escambia River at Monsanto Plant, 3.5 mi northeast of U.S. Highway 29, and 4.9 mi southeast of Cantonment.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, unused, artesian test well, diameter 4 in., depth 293 ft, cased to 230 ft, screened from 230 to 240 ft and 282 to 292 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 2.90 ft above land-surface datum.

DATUM.--Land-surface datum is 37.5 ft National Geodetic Vertical Datum of 1929 (levels by Monsanto Company).

PERIOD OF RECORD.--July 1954 to March 1965; March 1965 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.60 ft NGVD, Mar. 29, 1983; lowest measured, -11.45 ft NGVD, Jan. 17, 1973.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
09...	1450	4.00	02...	1215	3.98
JAN			JUL		
10...	1200	3.88	18...	1310	3.57
MAR					
07...	1255	4.80			

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ESCAMBIA COUNTY

WELL NUMBER.--303558087155501. Local Number 73. Monsanto Plant Well near Cantonment, FL.

LOCATION.--Lat 30°35'58", long 87°15'55", in land grant 30, T.1 N., R.30 W., Hydrologic Unit 03140305, on south bank of Escambia River at Monsanto Plant, 3.1 mi northeast of U.S. Highway 29, and 4.4 mi southeast of Cantonment.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 4 to 2.5 in., depth 306 ft, cased to 198 ft, screened from 198 to 208 ft, 294 to 304 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of casing, 3.00 ft above land-surface datum.

DATUM.--Land-surface datum is 51.89 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--November 1951 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.49 ft NGVD, Nov. 10, 1951; lowest, -13.51 ft NGVD, July 12, 1974.

ELEVATION, IN FEET, NGVD, OCTOBER 1983 TO SEMPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.44	5.06	4.89	4.56	4.84	5.64	5.56	5.17	4.46	4.03	4.72	4.54
10	4.54	5.24	5.25	4.66	5.81	5.71	5.47	5.27	4.40	3.27	4.41	4.54
15	4.82	4.78	5.75	4.76	5.32	5.45	5.61	5.15	4.32	4.09	4.88	4.92
20	5.31	4.81	5.55	4.32	4.76	5.41	5.36	5.12	4.15	4.51	4.94	4.95
25	5.30	4.67	4.61	4.57	4.30	5.45	5.20	5.23	3.89	4.63	4.79	4.63
EOM	5.04	4.50	3.45	4.88	3.69	5.23	5.00	4.75	3.71	4.30	6.18	4.67
MEAN	5.11	4.79	5.04	4.42	4.85	5.46	5.39	5.08	4.25	4.15	4.83	4.79
MAX	5.58	5.24	5.82	4.95	6.31	5.89	5.79	5.48	4.79	4.63	6.23	6.28
MIN	4.54	4.37	3.45	3.68	3.64	4.86	5.00	4.75	3.69	3.27	4.35	4.40

WTR YR 1984 MEAN 4.85 MAX 6.31 FEB 13 MIN 3.27 JUL 10

WELL NUMBER.--303610087165001. Local Number 74. Monsanto Company well near Cantonment, FL.

LOCATION.--Lat 30°36'10", long 87°16'50", in land grant 30, T.1 N., R.30 W., Hydrologic Unit 03140305, 1.3 mi north of paved road to Monsanto Plant, 1.6 mi east of U.S. Highway 29, and 3.4 mi southeast of Cantonment.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 to 2½ in., depth 352 ft, cased to 260 ft, screened from 260 to 270 ft and 340 to 350 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of casing, 3.00 ft above land-surface datum.

DATUM.--Land-surface datum is 97.39 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--November 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.42 ft NGVD, Nov. 10, 1951; lowest, -2.61 ft NGVD, Jan. 22, 1969.

ELEVATION, IN FEET, NGVD, OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	10.77	10.51	10.35	10.84	10.76	10.69	9.94	9.55		
10		10.96	10.75	10.74	10.15	10.74	10.74	10.58	9.90	9.71		
15		10.79	11.09	10.06	10.30	10.64	10.70	10.36	9.85	9.91		
20		10.82	10.91	9.86	10.02	10.62	10.50	10.20	9.85	10.25		
25		10.78	10.48	9.88	10.13	10.48	10.46	10.31	9.58	---		
EOM		10.68	9.65	10.13	10.07	10.40	10.82	10.15	9.50	---		
MEAN		10.77	10.66	10.07	10.19	10.53	10.63	10.44	9.79	9.87		
MAX		10.96	11.22	10.74	10.66	10.93	10.82	10.81	10.12	10.28		
MIN		10.54	9.50	9.09	9.45	9.61	10.32	10.12	9.44	9.43		

WTR YR 1984 MEAN 10.33 MAX 11.22 DEC 11 MIN 9.09 JAN 22

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ESCAMBIA COUNTY

WELL NUMBER.--305450087264001. Local Number 054-726-1. U.S. Geological Survey Observation Well at Oak Grove, FL.

LOCATION.--Lat 30°54'50", long 87°26'40", in NE¼NW¼NE¼ sec.33, T.5 N., R.32 W., Hydrologic Unit 03140305, 36 ft west of State Highway 99, 700 ft south of intersection of State Highways 99 and 164 at Oak Grove.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 206 ft, cased to 201 ft, screened from 201 to 206 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of coupling, 3.25 ft above land-surface datum. Prior to October 25, 1962 water-level recorder at same site and datum.

DATUM.--Land-surface datum is 259.27 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--May 1959 to October 1962; November 1962 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 176.54 ft NGVD, July 15, 1980; lowest measured, 166.00 ft NGVD, Mar. 5, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
13...	0850	172.86	02...	1010	172.44
NOV			JUN		
15...	1507	172.46	27...	1325	172.40
JAN			AUG		
10...	1451	172.16	21...	1410	172.25
FEB					
29...	1121	171.81			

WELL NUMBER.--305450087264002. Local Number 054-726-2. U.S. Geological Survey Observation Well at Oak Grove, FL.

LOCATION.--Lat 30°54'50", long 87°26'40", in NE¼NW¼NE¼ sec.33, T.5 N., R.32 W., Hydrologic Unit 03140305, 36 ft west of State Highway 99, 700 ft south of intersection of State Highways 99 and 164 at Oak Grove.

AQUIFER.--Nonartesian sand aquifer of the Tertiary System, Geologic Unit 120 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 107 ft, cased to 102 ft, screened from 102 to 107 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of nipple, 3.25 ft above land-surface datum.

DATUM.--Land-surface datum is 259.21 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--May 1959 to November 1962 (monthly); January 1963 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 194.71 ft NGVD, July 15, 1980; lowest measured, 179.64 ft NGVD, Mar. 5, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
13...	0840	189.06	02...	1000	187.34
NOV			JUN		
15...	1505	188.50	27...	1330	188.08
JAN			AUG		
10...	1445	187.46	21...	1415	187.62
FEB					
29...	1115	186.73			

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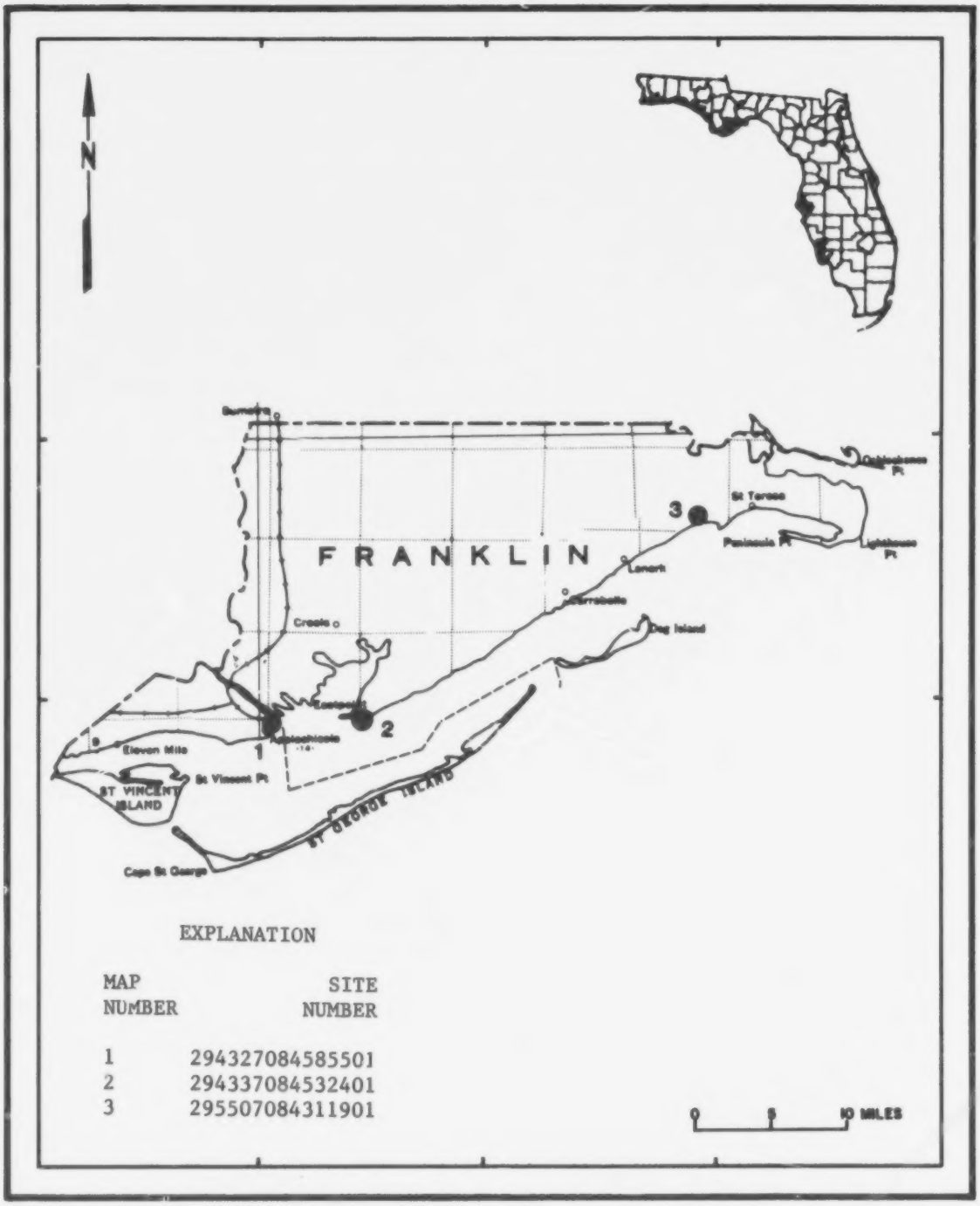

Figure 19. Location of wells in Franklin County

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FRANKLIN COUNTY

WELL NUMBER.--294327084585501. Local number 31. City of Apalachicola Well at Apalachicola, FL.

LOCATION.--Lat 29°43'27", long 84°58'55", in NW¼NE¼SW¼ Sec.6, T.9 S., R.7 W., Hydrologic Unit 03130011, south of west approach to Gorrie Bridge at Apalachicola.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 in., depth and casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 1 in. iron pipe, 1.30 ft above land-surface datum. Prior to July 1978, top of vitrified clay pipe, 1.00 ft above land-surface datum.

DATUM.--Land-surface datum is 5.80 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--
ELEVATIONS: September 1949 to current year (bimonthly).
WATER QUALITY: July 1961 (annually); January 1962 to May 1967 (semi-annually); January 1968 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.75 ft NGVD, Mar. 20 and May 1, 1950; lowest measured, 7.02 ft NGVD, July 5, 1968.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
DEC					
01...	1300	8.33	3300	24.5	810
MAR					
15...	1320	7.90	3120	24.0	760
MAY					
11...	1620	7.90	3510	24.0	1000
JUL					
17...	1750	8.50	3710	24.5	900
SEP					
21...	1550	8.10	3450	24.0	960

WELL NUMBER.--294337084532401. McCullogh Properties, Inc. well at Eastpoint, FL.

LOCATION.--Lat 29°43'37", long 84°53'24", in NE¼NE¼NE¼ sec.1, T.9 S., R.7 W. Hydrologic Unit 03130013, on south side of State Highway 65 near approach to St. George Island Bridge, .75 mi southwest of Eastpoint.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 in, depth 221 ft, cased to 163 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of reducer, 1.70 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 6 ft, from topographic map.

PERIOD OF RECORD.--May 1981 to current year (semiannually).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.02 ft NGVD, May 18, 1983; lowest measured, 8.44 ft NGVD, Nov. 13, 1981.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
DEC					
01...	1240	8.65	440	23.5	9.8
MAY					
11...	1650	8.64	--	--	--

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FRANKLIN COUNTY

WELL NUMBER.--295507084311901. St. James. St. Joe Paper Company Well near Lanark, FL.

LOCATION.--Lat 29°55'07", long 84°31'19", in NW¼SW¼NE¼ sec.34, T.6 S., R.3 W., Hydrologic Unit 03130013, 500 ft northwest of intersection of U.S. Highway 98 and State Highway 377, 10 miles northeast of Carrabelle.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 10 in, depth 174 ft, cased to 80 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of shelter floor, 1.0 ft above land-surface datum. Prior to September 1980 water-level recorder at same site and datum.

DATUM.--Land-surface datum is 32.09 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1977 altitude of land-surface datum was considered to be 30 ft, from topographic map.

PERIOD OF RECORD.--September 1976 to September 1980. October 1980 to current year (bimonthly). The figures of water levels as elevation in feet, National Geodetic Vertical Datum prior to Oct. 1977 are in error. Revised records are in files of the U.S. Geological Survey. See DATUM.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.88 ft NGVD, Apr. 25, 1979; lowest, 8.37 ft NGVD, Dec. 10, 1977.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			MAY		
30...	1410	9.89	14...	1730	10.09
JAN			JUL		
17...	1020	9.56	06...	1600	10.07
MAR			SEP		
16...	1350	9.80	21...	1700	10.49

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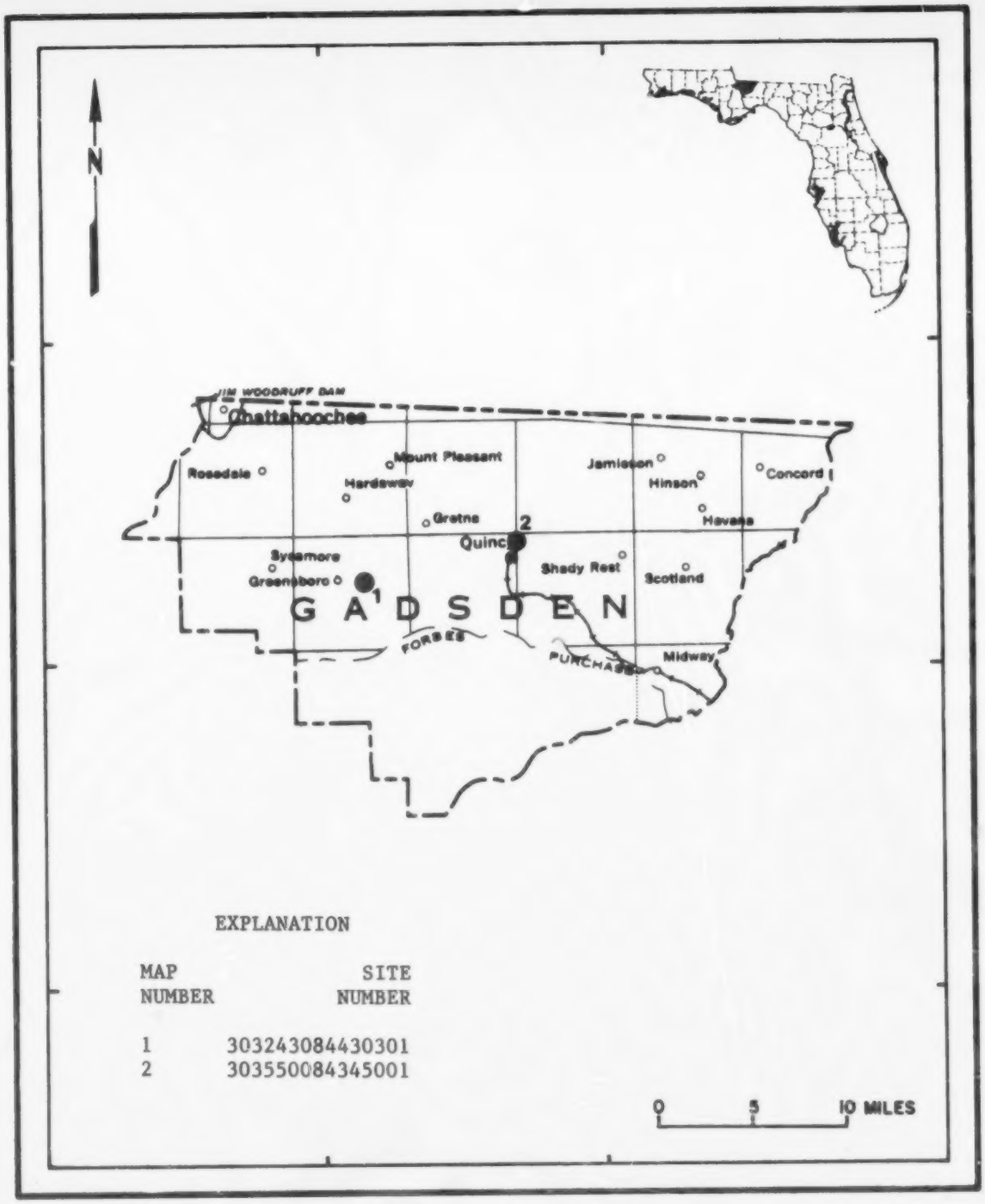

Figure 20. Location of wells in Gadsden County

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GADSDEN COUNTY

WELL NUMBER.--303243084430301. Franklin Fletcher Well near Greensboro, Fl.

LOCATION.--Lat 30°32'43", long 84°43'03", in SW¼NE¼NE¼ sec.27, T.2 N., R.5 W., Hydrologic Unit 03120003, 0.2 mi south of State Highway 274 and 1.9 mi southeast of Greensboro.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, irrigation, artesian well, diameter 8 in, depth 803 ft, cased to 530 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 8 in casing, 0.4 ft above land-surface datum.

DATUM.--Land-surface datum is 250.41 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--November 1974 to September 1977; October 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 76.57 ft NGVD, May 23, 1976; lowest, 71.31 ft NGVD, Sept. 23, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
08...	1600	74.40	10...	1125	75.65
JAN			JUN		
17...	1620	74.58	28...	1540	74.94
MAR			AUG		
01...	1635	75.06	22...	1300	75.01

WELL NUMBER.--303550084345001. City of Quincy Well No. 3 at Quincy, FL.

LOCATION.--Lat 30°35'50", long 84°35'50", in SE¼NW¼SW¼ sec.6, T.2 N., R.3 W., Hydrologic Unit 0312003, at water plant, 0.8 mi north of intersection of U.S. Highway 90 and State Highway 267 at Quincy.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, public-supply, artesian well, diameter 8 in to 6 in, depth 701 ft, cased to 430 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 6 in tee, 2.00 ft above land-surface datum. Prior to Oct. 1980 water-level recorder at same site and datum.

DATUM.--Land-surface datum is 151.46 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--February 1961 to July 1964 (bimonthly); January 1965 to April 1974 (semiannually); January 1975 to September 1977 (bimonthly), October 1977 to September 1980; October 1980 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 68.11 ft NGVD, May 7, 1968; lowest, 46.95 ft NGVD, Sept. 21, 1978.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
08...	0910	60.35	09...	1245	62.08
JAN			JUL		
06...	1610	59.20	05...	1540	61.83
MAR			AUG		
01...	1710	61.01	22...	1220	62.31

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Figure 21. Location of wells in Gilchrist County

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GILCHRIST COUNTY

WELL NUMBER.--294330082445001. USGS Observation Well near Trenton, FL.

LOCATION.--Lat 29°43'30", long 82°44'50", in NW¼NW¼NE¼ sec.7, T.9 S., R.16 E., Hydrologic Unit 03110206, on south west corner of intersection of State Highways 47 and 232, 8.5 mi north of Trenton.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 101 ft, cased to 55.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 2.75 ft above land-surface datum.

DATUM.--Land-surface datum is 84.56 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1964 to May 1965 (bimonthly), June 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 74.68 ft NGVD, Oct. 10, 1965; lowest, 64.26 ft NGVD, Jan. 20, 21, 1978.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	66.32	63.77	62.42	64.39	64.75	64.68	65.42	65.56	64.09		65.37	64.06
10	65.95	63.41	62.23	64.84	64.29	65.16	66.28	64.99	63.73		65.67	63.70
15	65.55	62.97	62.62	64.77	63.95	65.56	66.77	64.48	63.43		65.41	63.27
20	65.15	62.66	62.80	64.59	63.60	65.52	66.95	63.92	63.14		65.13	62.95
25	64.73	62.89	62.60	64.46	63.77	65.20	66.82	63.60	63.03		64.85	62.54
EOM	64.16	62.68	63.34	64.87	64.35	65.30	---	64.17	---		64.45	62.39
MEAN	65.43	63.17	62.67	64.58	64.14	65.16	66.38	64.43	63.54		65.18	63.28
MAX	66.43	64.08	64.56	64.89	64.87	65.56	66.95	65.76	64.20		65.67	64.34
MIN	64.16	62.62	62.23	63.61	63.52	64.35	65.28	63.57	63.03		64.45	62.39

WTR YR 1984 MEAN 64.35 MAX 66.95 APR 19 AND OTHERS MIN 62.23 DEC 10

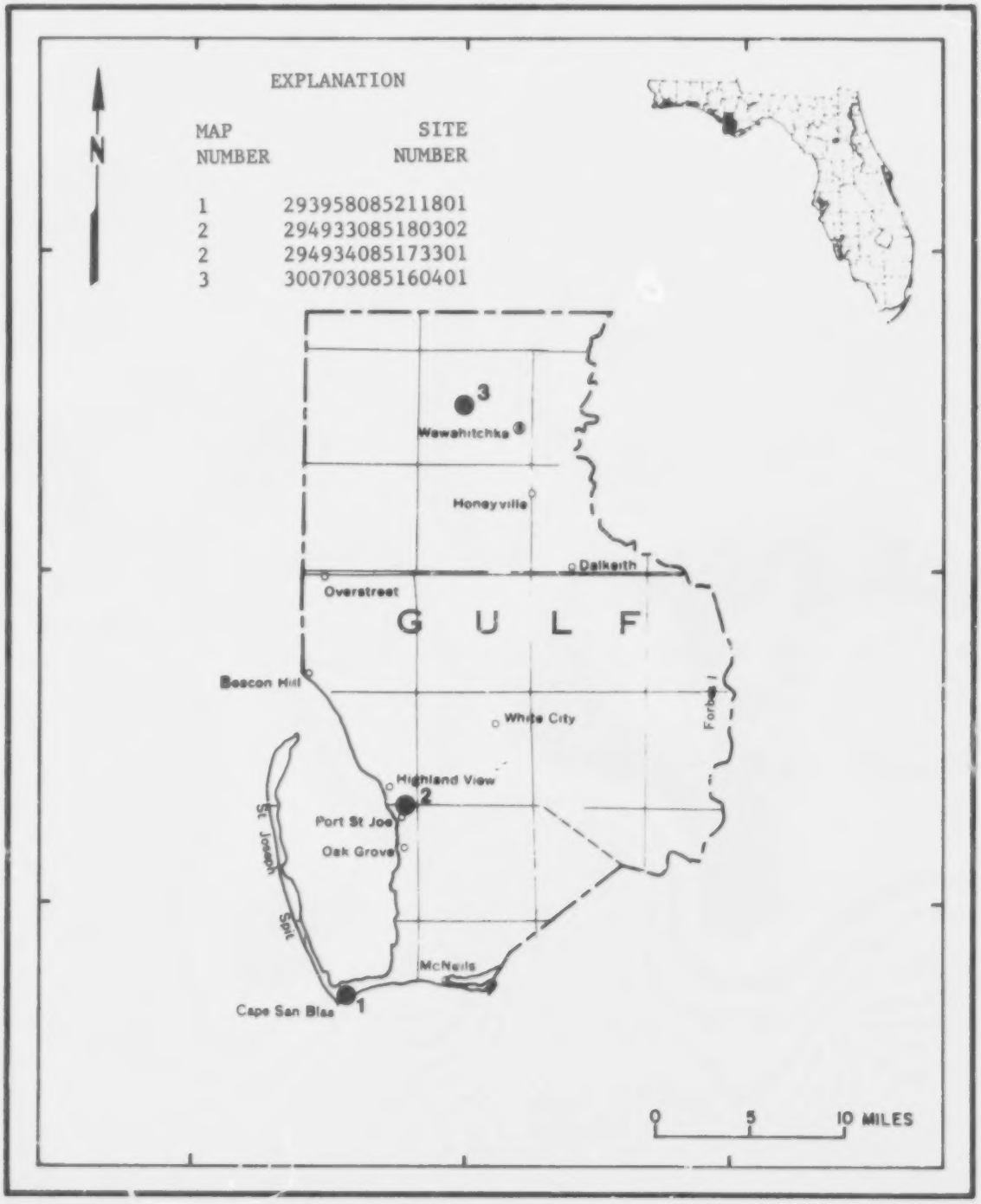

Figure 22. Location of wells in Gulf County

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GULF COUNTY

WELL NUMBER.--293958085211801. Local Number D3A. U.S. Air Force Well near Port St. Joe, FL.

LOCATION.--Lat 29°39'58", long 85°21'18", in NE¼NE¼SE¼ sec.29, T.9 S., R.11 W., Hydrologic Unit 03140101, 0.3 mi south of Cape San Blas Lighthouse, 3.2 mi west of intersection of State Highway 30E and U.S. Highway 98, and 10 mi southwest of Port St. Joe.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 595 ft, cased to 487 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of bushing, 1.48 ft above land-surface datum.

DATUM.--Land-surface datum is 7.24 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--April 1961 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.44 ft NGVD, Apr. 27, 1961; lowest measured, 6.00 ft NGVD, May 10, 1983.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			MAY		
16...	1205	7.92	10...	1545	7.91
JAN			JUN		
10...	1420	8.22	20...	1440	8.00
MAR			AUG		
28...	1310	8.36	22...	1225	8.32

WELL NUMBER.--294933085180302. Town of Port St. Joe Well Number 1 at Port St. Joe, FL.

LOCATION.--Lat 29°49'33", long 85°18'03", SW¼NE¼NW¼ sec.36, T.7 S., R.11 W., Hydrologic Unit 03140104, in fenced area on east side of water treatment plant at Port St. Joe.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter, depth and length of casing unknown.

DATUM.--Altitude of land-surface datum is 12 ft, from topographic map.

REMARKS.--Water quality records prior to October 1984 are in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--Water Quality: May 1981 to current year (bimonthly).

TEMPERATURE AND CHLORIDE DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV				MAY			
16...	1038	--	19	10...	1430	25.0	20
FEB				AUG			
28...	1630	25.0	20	22...	1130	25.0	18

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GULF COUNTY

WELL NUMBER.--294934085173301. St. Joe Paper Company Well at Port St. Joe, FL.

LOCATION.--Lat 29°49'34", long 85°17'33", NW¼NE¼SE¼ sec. 36, T.7 S., R.11 W., Hydrologic Unit 03140101, about 100 ft south of canal, 0.55 mi northeast of water treatment plant at Port St. Joe.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 16 in, depth and casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 1 in hole in pumpbase 1.3 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 18 ft from topographic map.

PERIOD OF RECORD.--May 1980 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.20 ft NGVD, Jan. 13, 1982, lowest measured -9.25 ft NGVD, May 27, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
16...	1110	-2.72	10...	1415	-4.35
JAN			JUN		
10...	1406	-2.37	25...	1410	-3.82
FEB			AUG		
28...	1625	-3.03	22...	1150	-3.32

WELL NUMBER.--300703085160401. Exxon Supply Well near Wewahitchka, FL.

LOCATION.--Lat 30°07'03", long 85°16'04", in SW¼NE¼SW¼ sec. 20, T.4 S., R.10 W., Hydrologic Unit 03140101, 300 ft east of dirt road, 2.0 mi south of State Highway 22, 4.5 mi west of Wewahitchka.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, supply, unused, artesian well, diameter 8 in., depth 242 ft, cased to 232 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of shelter floor 3.18 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 41 ft from topographic map.

PERIOD OF RECORD.--November 1980 to April 1981 (bimonthly); May 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 29.60 ft NGVD, Apr. 23, 1983; lowest 17.35 ft NGVD, June 28, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---		---	29.14	29.18	---	---	25.66	25.78	26.88	27.49
10		---		29.06	---	---	---	---	24.90	26.15	27.11	27.62
15		28.74		---	---	---	---	24.72	24.78	25.37	27.23	27.33
20		28.83		---	---	---	---	23.72	25.29	25.86	---	26.56
25		---		---	---	---	---	24.74	25.48	26.23	27.05	25.81
EOM		---		---	28.94	29.37	---	25.69	25.34	26.73	27.35	25.16
MEAN		28.68		29.00	29.13	29.16	29.38	24.76	25.29	25.97	27.11	26.80
MAX		28.83		29.06	29.20	29.37	29.39	25.72	25.90	26.73	27.35	27.62
MIN		28.57		28.94	28.94	28.95	29.36	23.68	24.78	25.37	26.74	25.16

WTR YR 1984 MEAN 26.59 MAX 29.39 APR 1 MIN 23.68 MAY 21

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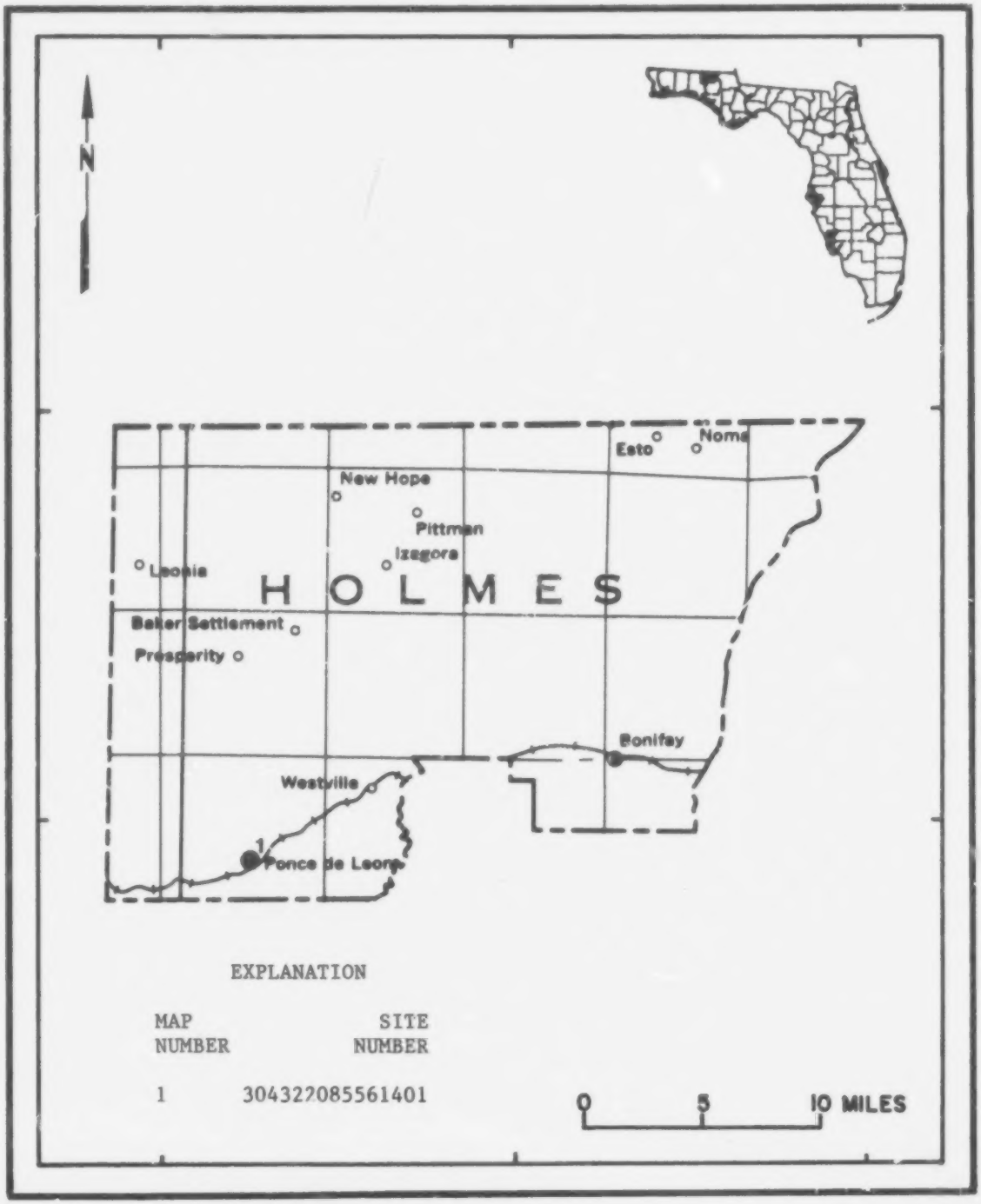

Figure 23. Location of wells in Holmes County

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HOLMES COUNTY

WELL NUMBER.--304322085561401. Local Number 4. Mrs. Dan Hughes Well at Ponce de Leon, FL.

LOCATION.--Lat 30°43'22", long 85°56'14", in SE¼NE¼SE¼ sec.28, T.4 N., R.17 W., Hydrologic Unit 03140203, at water tower, south of Louisville and Nashville Railroad tracks at Ponce de Leon.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 6 in, depth 187 ft, casing length unknown.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of reducing tee, 1.50 ft above land-surface datum.

DATUM.--Land-surface datum is 62.18 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Water levels affected by pumping at times.

PERIOD OF RECORD.--June 1938 (annually); September 1947 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.08 ft NGVD, May 6, 1964; lowest measured, 62.20 ft NGVD, Nov. 6, 1974.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)
JAN 20...	1430	64.37

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Figure 24. Location of wells in Jackson County

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JACKSON COUNTY

WELL NUMBER.--303701085231301. Florida Forest Service Observation Well near Compass Lake, FL.

LOCATION.--Lat 30°37'01", long 85°23'13", in NE¼NE¼SE¼ sec 36, T.3 N., R.11 W., Hydrologic Unit 03140101, 100 ft east of U.S. Highway 231, 1.0 mi north of Compass Lake.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, unused, artesian well, diameter 4 in., depth 522 ft, cased to 433 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 4 in. casing, 1.0 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 305 ft from topographic map.

PERIOD OF RECORD.--May 1980 (annually); October 1981 to September 1982 (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 105.90 ft NGVD, June 21, 1984; lowest measured, 97.20 ft NGVD, Jan. 21, 1982.

ELEVATION, IN FEET, NGVD, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			JUN		
17...	1345	97.74	21...	0755	105.90
MAR			AUG		
01...	0825	102.68	21...	1430	103.42
MAY					
08...	0920	104.74			

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JACKSON COUNTY

WELL NUMBER.--304230084535901. Homer Birt well near Sneads, FL.

LOCATION.--Lat 30°42'32", long 84°53'59", in SE¼SW¼SE¼ sec.26, T.4 N., R.7 W., Hydrologic Unit 03130004, 200 ft north of U.S. Highway 90, 1.55 mi east of intersection of U.S. Highway 90 and State Highway 286 at Sneads.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth 101 ft, cased to 70 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of coupling, 1.45 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 98 ft, from topographic map.

PERIOD OF RECORD.--November 1982 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 80.48 ft NGVD, Mar. 1, 1984; lowest measured, 72.20 ft NGVD, Nov. 14, 1983.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
04...	1255	73.38	19...	1015	78.61
JAN			JUL		
05...	1230	77.50	14...	1230	77.97
MAR			SEP		
15...	0835	79.44	22...	0950	73.85

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
14...	1255	72.20	07...	1505	79.70
JAN			JUN		
17...	1300	76.58	26...	1025	75.67
MAR			AUG		
01...	1010	80.48	22...	1340	76.61

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WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

JACKSON COUNTY

WELL NUMBER.--304413085064401. Local Number 46. International Paper Corporation Well near Cypress, FL.

LOCATION.--Lat 30°44'13", long 85°06'44", in NW¼NW¼NW¼ sec.23, T.4 N., R.9 W., Hydrologic Unit 03130012, 600 ft south of U.S. Highway 90 and 2.0 mi west of intersection of U.S. 90 and SR 275 at Cypress.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, observation, artesian well, diameter 4 in, depth 210 ft, cased to 94 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of steel plate, 1.00 ft above land-surface datum.

DATUM.--Land-surface datum is 166.75 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--February 1961 to July 1964 (bimonthly); January 1965 to May 1977 (semiannually); November 1977 to current year (bimonthly). Records of water levels prior to October 1975 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 106.89 ft NGVD, May 7, 1984; lowest measured, 82.18 ft NGVD, Jan. 6, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV 14...	1555	90.02	MAY 07...	1530	106.89
JAN 17...	1325	93.04	JUN 26...	1100	102.36
MAR 01...	1050	100.01	AUG 22...	1400	100.22

WELL NUMBER.--305755085102401. Hollingsworth Well near Malone, FL.

LOCATION.--Lat 30°57'55", long 85°10'24", in SE¼SW¼NW¼ sec.31, T.7 N., R.9 W., Hydrologic Unit 03130012, 0.4 mi north of State Highway 2, and 0.7 mi west of State Highway 71, near Malone.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 90 ft, cased to 60 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 1.0 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 147 ft from topographic map.

PERIOD OF RECORD.--November 1982 to September 1983.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 124.65 ft NGVD, May 21, 1983; lowest measured, 101.79 ft NGVD, Nov. 4, 1982.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	111.07	108.54	107.74	112.70		119.54			---	---	121.39	119.26
10	110.62	108.17	108.94	112.97		---			---	---	121.62	118.71
15	110.16	107.78	110.59	112.71		---			---	---	121.23	118.02
20	109.78	107.47	111.53	---		---			---	---	120.93	117.40
25	109.36	107.40	111.90	---		---			---	---	120.32	116.75
EOM	108.86	107.59	112.27	---		---			---	---	119.79	116.17
MEAN	110.12	107.88	110.34	112.68		118.77			120.84	120.73	120.89	117.94
MAX	111.39	108.80	112.30	112.97		122.31			120.84	120.73	121.62	119.70
MIN	108.86	107.18	107.61	112.36		117.55			120.84	120.73	119.79	116.17

WTR YR 1984 MEAN 113.42 MAX 122.31 MAR 6 MIN 107.18 NOV 23

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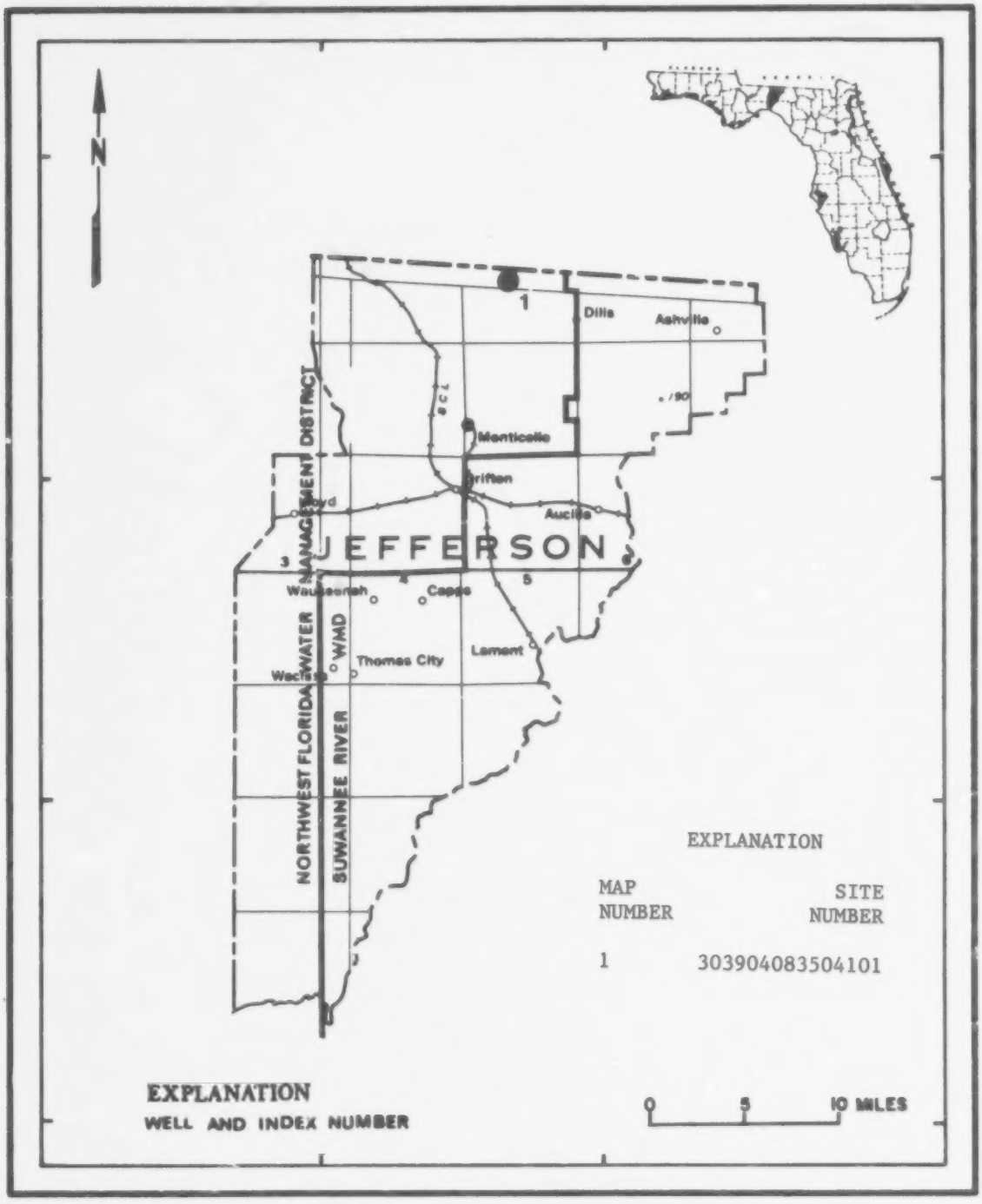

Figure 25. Location of wells in Jefferson County

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JEFFERSON COUNTY

WELL NUMBER.--303904083504101. Lake Fontain well at Merrily Plantation near Monticello, FL.

LOCATION.--Lat 30°39'04", long 83°50'41", in land grant 150, T.3 N., R.5 E., Hydrologic Unit 03110103, about 0.4 mi. south of Florida-Georgia border, 1.9 mi. west of U.S. Highway 19 and 7.5 mi. northeast of Monticello.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, irrigation, artesian well, diameter 10 in., depth 269 ft., cased to 148 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 1.0 ft. above land-surface datum. Prior to Aug. 28, 1981, tape measured.

DATUM.--Altitude of land-surface datum is 190 ft., from topographic map.

PERIOD OF RECORD.--June to August 1981 (monthly); August 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 77.62 ft. NGVD, May 3, 1984; lowest, 65.32 ft. NGVD, Jan. 4, 1983.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	67.26	66.83	---	---	65.89	66.41	66.96	66.90	66.93	66.73	66.62	66.52
10	67.23	66.70	---	---	66.06	66.40	66.67	66.94	66.87	66.69	66.59	66.52
15	67.15	66.64	---	---	66.15	66.52	---	66.91	66.80	66.64	---	66.57
20	66.91	66.58	---	---	66.30	66.60	66.89	66.98	66.74	66.70	---	66.45
25	67.04	66.35	---	---	66.21	66.59	67.06	67.01	66.69	66.58	66.67	66.52
EOM	66.72	66.46	---	66.09	66.25	66.62	66.85	66.96	66.74	66.61	66.54	66.34
MEAN	67.11	66.58	66.51	65.95	66.12	66.48	66.82	66.96	66.80	66.66	66.62	66.49
MAX	67.54	66.84	66.51	66.09	66.41	66.64	67.06	67.08	66.96	66.75	66.71	66.65
MIN	66.72	66.32	66.51	65.82	65.86	66.06	66.62	66.90	66.66	66.56	66.52	66.32

WTR YR 1982 MEAN 66.66 MAX 67.54 OCT 2 MIN 65.82 JAN 28

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	66.27	65.81	65.81	65.55	65.81	66.56	68.68	71.01	71.96	72.21	71.92	71.57
10	66.32	65.87	65.72	65.65	66.15	66.97	69.07	71.16	71.92	72.22	71.88	71.50
15	66.26	65.87	65.76	65.67	65.95	67.50	69.56	71.46	72.17	72.21	71.83	71.37
20	66.19	65.79	65.62	65.74	65.95	67.83	69.95	71.53	72.18	72.06	71.86	71.40
25	66.09	65.59	65.50	65.54	66.27	67.77	70.38	71.75	72.22	72.09	71.72	71.21
EOM	66.04	65.72	65.48	65.66	66.69	68.53	70.68	72.01	72.11	71.94	71.77	71.21
MEAN	66.21	65.90	65.64	65.62	66.05	67.40	69.63	71.44	72.07	72.11	71.87	71.43
MAX	66.41	66.18	66.04	65.80	66.69	68.53	70.68	72.04	72.22	72.22	72.04	71.74
MIN	66.03	65.59	65.45	65.43	65.50	66.25	68.56	70.75	71.82	71.94	71.70	71.18

WTR YR 1983 MEAN 68.79 MAX 72.22 JUN 25 AND OTHERS MIN 65.43 JAN 4

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	71.18	70.63	70.26	71.23	72.00	73.16	75.68	77.37	77.00	76.30	76.21	75.89
10	71.01	70.56	70.22	71.49	71.96	73.34	76.22	77.35	76.89	76.16	76.31	75.91
15	70.84	70.40	70.42	71.17	72.16	73.75	76.71	77.38	76.71	76.04	76.20	75.75
20	70.82	70.42	70.48	71.11	72.42	74.60	76.78	77.36	76.60	75.98	76.24	75.63
25	70.72	70.09	70.43	71.47	72.47	74.66	77.05	77.21	76.55	75.98	76.05	75.38
EOM	---	70.08	70.56	71.51	72.50	74.87	77.21	77.11	76.39	76.10	76.04	75.23
MEAN	70.93	70.34	70.47	71.25	72.21	73.92	76.46	77.31	76.74	76.10	76.18	75.64
MAX	71.20	70.69	71.01	71.68	72.88	75.39	77.25	77.62	77.13	76.30	76.32	76.02
MIN	70.43	70.07	70.06	70.69	71.50	72.56	74.97	77.11	76.37	75.96	75.99	75.23

WTR YR 1984 MEAN 74.00 MAX 77.62 MAY 3 MIN 70.06 DEC 7

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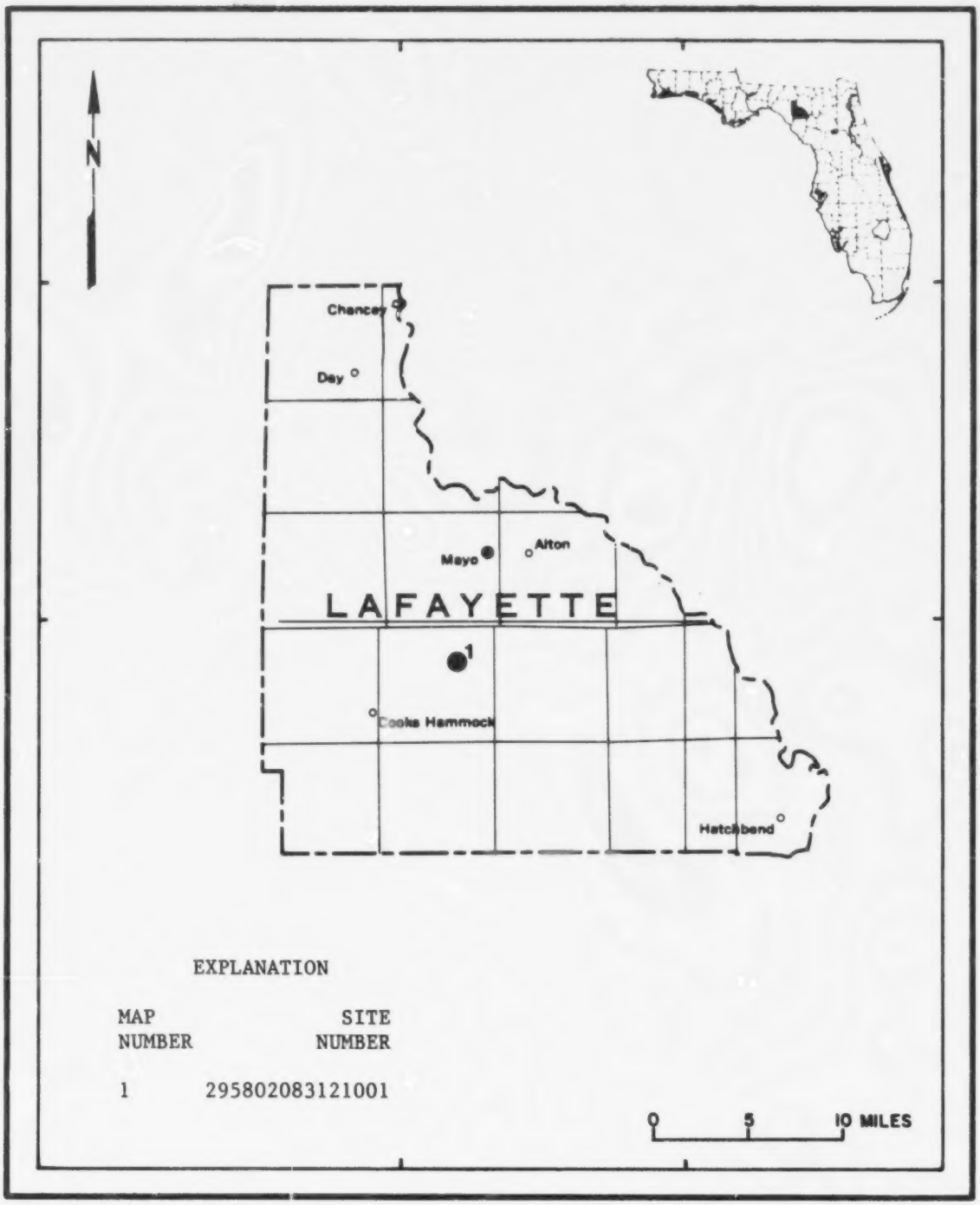

Figure 26. Location of wells in Lafayette County

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LAFAYETTE COUNTY

WELL NUMBER.--295802083121001. Lester McCray Well near Mayo, FL.

LOCATION.--Lat 29°58'02", long 83°12'10", in NW¼NW¼NW¼ sec.14, T.6 S., R.11 E., Hydrologic Unit 03110102, 0.6 mi southeast of State Highway 51, 5.0 mi northeast of Cooks Hammock and 5.8 mi (9.3 km) south of Mayo.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, irrigation, artesian well, diameter 6 in., depth 146 ft, cased to 112 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top edge of recorder shelf, 3.63 ft above land-surface datum.

DATUM.--Land-surface datum is 73.85 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--February 1961 to March 1976 (bimonthly); May 1976 to current year. (Discontinued.)

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 70.71 ft NGVD, Apr. 9, 1983; lowest measured, 62.13 ft NGVD, Nov. 4, 1968.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	67.19	66.28	68.15	69.83	69.04	69.71	70.60	67.77	66.86	66.93	69.28	68.15
10	67.53	66.45	68.12	69.59	68.74	69.91	69.99	67.36	66.26	66.77	68.37	67.72
15	67.45	66.16	69.38	69.24	68.84	69.38	69.40	66.88	65.87	66.73	68.09	67.16
20	67.10	66.63	69.08	69.53	68.56	69.10	68.90	66.41	65.58	68.92	69.38	66.80
25	66.93	68.08	68.74	69.55	69.23	68.83	68.76	66.80	65.61	69.20	69.49	66.28
EOM	66.50	68.08	70.32	69.20	70.20	69.68	68.15	67.43	65.80	70.44	68.69	---
MEAN	67.15	66.83	68.90	69.53	69.05	69.59	69.34	67.13	66.08	67.91	68.98	67.39
MAX	67.55	68.22	70.44	70.21	70.30	70.22	70.65	68.05	67.33	70.44	70.33	68.53
MIN	66.50	66.05	67.87	69.20	68.56	68.79	68.15	66.30	65.50	66.06	67.85	66.28

WTR YR 1984 MEAN 68.17 MAX 70.65 APR 4 MIN 65.50 JUN 28

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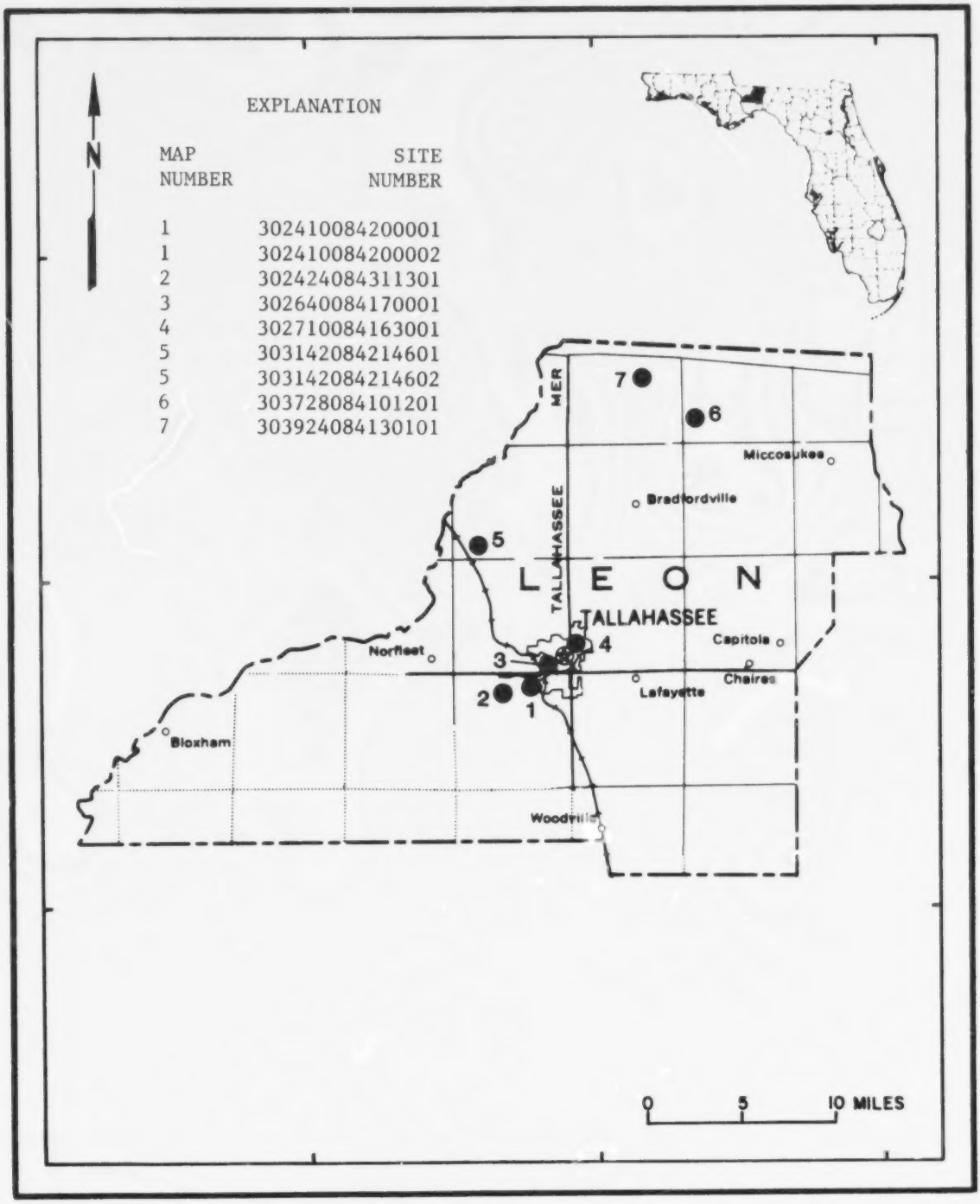

Figure 27. Location of wells in Leon County

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LEON COUNTY

WELL NUMBER.--302410084200001. Local number 150. Florida State University well near Tallahassee, FL.

LOCATION.--Lat 30°24'10", long 84°20'00", in NW¼SW¼NE¼ sec. 16, T.1 S., R.1 W., Hydrologic Unit 03120001, 250 ft west of Lake Bradford Road and 4.0 mi southwest of State Capitol in Tallahassee, FL.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 57 ft, cased to 57 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 3.00 ft above land-surface datum.

DATUM.--Land-surface datum is 37.51 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--May 1960 to February 1965; April 1965 to September 1972 (bimonthly); September 1972 to September 1979; October 1979 to May 1981 (semiannually); May 1981 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.95 ft NGVD, Apr. 12, 1973; lowest, 18.20 ft NGVD, June 27, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			MAY		
09...	0830	24.55	17...	1347	30.48
DEC			JUL		
30...	1240	24.81	06...	1025	28.59
FEB			AUG		
28...	1705	26.77	22...	0930	28.68

WELL NUMBER.--302410084200002. Local number 150A. Florida State University well near Tallahassee, FL.

LOCATION.--Lat 30°24'10", long 84°20'00", in NW¼SW¼NE¼ sec. 16, T.1 S., R.1 W., Hydrologic Unit 03120001, 250 ft west of Lake Bradford Road and 4.0 mi southwest of State Capitol in Tallahassee, FL.

AQUIFER.--Nonartesian sand aquifer of the Quaternary System, Geologic Unit 110 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 1¼ in., depth 15 ft, cased to 12 ft, well point from 12 to 15 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 3.00 ft above land-surface datum.

DATUM.--Land-surface datum is 37.52 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--May 1960 to October 1979 (bimonthly); October 1979 to May 1981 (semiannually); May 1981 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.16 ft NGVD, Apr. 4, 1973; lowest measured, 25.66 ft NGVD, June 27, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			FEB		
09...	0815	30.17	28...	1710	33.35
DEC			MAY		
30...	1235	31.25	17...	1350	32.47

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LEON COUNTY

WELL NUMBER.--302424084311301. City of Tallahassee Airport Well near Tallahassee, FL.

LOCATION.--Lat 30°24'24", long 84°21'13", in NE¼SE¼SW¼ sec. 8, T.1 S., R.1 W., Hydrologic Unit 03120001, 150 ft west of State Highway 263, 0.7 mi northeast of airport control tower, and 5.0 mi southwest of State Capitol at Tallahassee, FL.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, municipal, artesian well, diameter 10 in., depth 194 ft cased to 190 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 1.65 ft above land-surface datum.

DATUM.--Land-surface datum is 67.18 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 30.58 ft NGVD, April 23, 1984; lowest, 17.83 ft NGVD, Sept. 30, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	23.30	21.86	21.29		---	24.36	27.68	30.05	27.87	26.06	26.63	26.05
10	23.06	21.64	21.38		---	25.50	28.68	29.68	27.44	26.20	26.76	25.87
15	22.86	21.40	21.46		---	26.60	29.82	29.32	27.03	26.18	26.66	25.55
20	22.61	---	21.62		23.26	27.17	30.39	28.88	26.64	26.15	26.58	25.26
25	22.41	---	---		23.26	27.33	30.50	28.51	26.32	26.14	26.43	24.86
EOM	22.06	---	---		23.54	27.28	30.33	28.20	25.96	26.27	26.26	24.50
MEAN	22.80	21.73	21.44		23.30	26.18	29.36	29.22	27.02	26.13	26.55	25.46
MAX	23.51	22.03	21.69		23.54	27.50	30.58	30.28	28.15	26.27	26.76	26.22
MIN	22.06	21.40	21.22		23.18	23.72	27.29	28.20	25.96	25.84	26.26	24.50

WTR YR 1984 MEAN 25.80 MAX 30.58 APR 23 MIN 21.22 DEC 2

WELL NUMBER.--302640084170001. Leon 152. State of Florida Observation Well at Tallahassee, FL.

LOCATION.--Lat 30°26'40", long 84°17'00", in NW¼SW¼NE¼ sec.35, T.1 N., R.1 W., Hydrologic Unit 03120001, behind Herman Gunter Building, at corner of West Tennessee Street and Woodward Street, 2.7 mi west of State Capitol at Tallahassee.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 to 4 to 3 in, depth 310 ft, cased to 146 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 6 in casing, 0.86 ft above land-surface datum. Since October 15, 1960 water-level recorder, used for display purposes only at Herman Gunter Building.

DATUM.--Land-surface datum is 100.52 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--August 1960 (annually); October 1960 to December 1961; January 1962 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.76 ft NGVD, July 1, 1965; lowest measured, 18.00 ft NGVD, Nov. 18, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			JUL		
30...	1040	23.59	06...	0950	28.11
DEC			AUG		
30...	1005	24.10	22...	0915	28.28
APR					
19...	1455	31.56			

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LEON COUNTY

WELL NUMBER.--302710084163001. Local number 7, City of Tallahassee Test Well at Tallahassee, FL.

LOCATION.--Lat 30°27'10", long 84°16'30", in NE¼SW¼SW¼ sec.30, T.1 N., R.1 E., Hydrologic Unit 03120001, in pump house at Lafayette Park, 1.3 mi northeast of State Capitol at Tallahassee.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 6 in, depth 314 ft, cased to 165 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 1.20 ft above land-surface datum.

DATUM.--Land-surface datum is 186.50 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1945 to January 1965; February 1965 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level 37.66 ft NGVD, Apr. 26, 1948; lowest 16.42 ft NGVD, June 14, 1955.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			APR		
31...	1115	24.88	30...	1350	32.44
NOV			MAY		
30...	0935	24.50	30...	1010	31.09
DEC			JUN		
30...	1200	24.08	29...	0945	28.88
JAN			AUG		
30...	1440	25.98	01...	1400	29.69
FEB			31...	1245	29.01
27...	1750	26.62			
MAR					
30...	1050	29.52			

WELL NUMBER.--303142084214601. USGS Observation Well at Lake Jackson near Tallahassee, FL.

LOCATION.--Lat 30°31'42", long 84°21'46", in NE¼NE¼SE¼ sec.31, T.2 N., R.1 W., Hydrologic Unit 03120003, 0.3 mi south of U.S. Highway 27 and 12 mi northwest of State Capitol at Tallahassee.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 6 in., depth 225 ft, cased to 100 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 3.09 ft above land-surface datum.

DATUM.--Land-surface datum is 122.20 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.94 ft NGVD, May 3, 1984; lowest, 28.04 ft NGVD, Jan. 7, 1972.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.68	34.58	34.04	34.81	35.57	36.84	40.25	42.71	41.75	39.97	39.93	39.25
10	35.48	34.34	33.97	34.99	35.67	37.49	41.02	42.69	41.38	39.65	39.85	39.05
15	35.33	33.85	34.36	34.69	35.82	38.16	41.77	42.58	41.17	39.47	39.65	38.56
20	35.24	33.83	34.33	34.73	36.01	39.14	42.10	42.27	40.80	39.71	39.75	38.34
25	34.98	33.58	34.18	34.97	35.90	39.42	42.46	42.17	40.44	39.56	39.68	37.85
EOM	34.63	33.94	34.25	35.25	36.13	39.67	42.59	42.05	40.06	39.80	39.33	37.44
MEAN	35.28	34.01	34.23	34.82	35.80	38.25	41.50	42.43	41.05	39.70	39.72	38.50
MAX	35.81	34.65	34.65	35.32	36.22	40.04	42.59	42.94	42.02	40.03	40.06	39.25
MIN	34.59	33.48	33.88	34.36	35.26	36.21	39.73	42.05	40.05	39.47	39.33	37.44

WTR YR 1984 MEAN 37.95 MAX 42.94 MAY 3 MIN 33.48 NOV 22

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LEON COUNTY

WELL NUMBER.--303142084214602. USGS Observation Well at Lake Jackson near Tallahassee, FL.

LOCATION.--Lat 30°31'42", long 84°21'46", in NE¼NE¼SE¼ sec.31, T.2 N., R.1 W., Hydrologic Unit 03120003, 0.3 mi south of U.S. Highway 27 and 12 mi northwest of State Capitol at Tallahassee.

AQUIFER.--Hawthorn sand-and-gravel aquifer of the Miocene System, Geologic Unit 122 HTRNS.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 6 in, depth 54 ft, cased to 49 ft, screened from 49 to 54 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 3.11 ft above land-surface datum.

DATUM.--Land-surface datum is 122.26 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1966 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 93.85 ft NGVD, Sept. 30, 1966; lowest, 79.43 ft NGVD, Dec. 17, 1972.

NOTE: Elevations for October 1982 to September 1983 shown below were omitted from 1983 Data Report.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	80.75	80.30	80.24	79.70	79.81	80.86	82.28	84.66	85.52	86.03	85.91	85.23
10	80.75	80.24	80.04	79.92	80.29	80.90	82.68	84.80	85.48	86.13	85.86	85.19
15	80.65	80.28	80.05	79.86	80.04	81.41	83.21	85.10	85.74	86.18	85.75	85.21
20	80.52	80.22	79.94	80.00	80.04	81.54	83.61	85.09	85.79	86.06	85.70	85.07
25	80.46	79.98	79.78	79.67	80.49	81.46	84.02	85.34	85.88	86.12	85.49	84.97
EOM	80.44	80.19	79.75	79.80	80.95	82.16	84.28	85.57	85.99	85.93	85.50	85.05
MEAN	80.62	80.31	79.96	79.83	80.17	81.27	83.26	85.04	85.68	86.04	85.75	85.18
MAX	80.87	80.67	80.46	80.08	80.95	82.16	84.30	85.58	85.90	86.18	86.05	85.49
MIN	80.39	79.98	79.73	79.60	79.60	80.46	82.20	84.37	85.38	85.88	85.47	84.93

WTR YR 1983 MEAN 82.77 MAX 86.18 JUL 15 MIN 79.60 JAN 13 AND OTHERS

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	85.02	84.54	83.97	84.54	84.92	85.84	88.64	91.01	91.22	90.55	89.99	89.43
10	84.83	84.46	83.84	84.81	84.82	86.05	89.28	90.99	91.14	90.35	---	89.44
15	84.63	84.21	84.06	84.41	85.10	86.64	90.00	91.15	91.06	90.17	---	89.23
20	84.65	84.24	83.96	84.30	85.34	87.61	90.20	91.19	90.94	90.10	---	89.12
25	84.58	83.95	83.77	84.67	85.39	87.67	90.50	91.16	90.89	89.96	89.67	88.83
EOM	84.29	83.75	83.82	84.55	85.33	87.76	90.70	91.20	90.69	89.98	89.59	88.69
MEAN	84.72	84.17	84.00	84.48	85.12	86.78	89.70	91.09	91.02	90.23	89.76	89.15
MAX	85.02	84.56	84.41	84.82	85.76	88.28	90.70	91.23	91.27	90.62	90.05	89.57
MIN	84.27	83.75	83.72	83.94	84.45	85.29	87.89	90.76	90.69	89.94	89.53	88.69

WTR YR 1984 MEAN 87.43 MAX 91.27 JUN 3 AND OTHERS MIN 83.72 DEC 17

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LEON COUNTY

WELL NUMBER.--303728084101201. Local number 36A. USGS Observation Well at Dawkins Pond near Bradfordville, FL.

LOCATION.--Lat 30°37'28", long 84°10'12", in SE¼SE¼SW¼ sec.30, T.3 N., R.2 E., Hydrologic Unit 0312003, at Dawkins Pond Church, 100 ft west of U.S. Highway 319, and 5.2 mi north of Bradfordville.

AQUIFER.--Hawthorn sand-and-gravel of the Miocene System, Geologic Unit 122 HTRNS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 1¼ in, depth 41 ft, cased to 38 ft, screened from 38 to 41 ft. Well deepened April 1955 from 30 to 41 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 3.85 ft above land-surface datum.

DATUM.--Land-surface datum is 102.12 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--December 1935 to June 1937 (weekly); July 1942 to March 1943 (monthly); March 1943 to December 1943 (weekly); January 1947 to current year (monthly). Prior to January 1955 published as Leon 36.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 104.07 ft NGVD, Apr. 27, 1965; lowest measured, 68.46 ft NGVD, Feb. 28, 1957.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			MAY		
03...	0730	85.81	23...	1655	98.18
DEC			JUN		
29...	1555	90.66	29...	1120	95.95
FEB			AUG		
27...	1615	97.14	20...	1115	95.54

WELL NUMBER.--303924084130101. Tall Timbers Research Well near Iamonia, FL.

LOCATION.--Lat 30°39'24", long 84°13'01", in NW¼SW¼SW¼ sec.15, T.3 N., R.1 E., Hydrologic Unit 03120003, about 0.3 mi west of Tall Timbers Research Center office, about 0.4 mi south of State Highway 12, and 2.8 mi southwest of Iamonia.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, irrigation, artesian well, diameter 8 in., depth 249 ft, cased 221 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top edge of 6 in. horizontal discharge line, 1.8 ft above land-surface datum.

DATUM.--Land-surface datum is 101.42 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--December 1974 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 75.48 ft NGVD, May 3, 1977; lowest measured, 58.82 ft NGVD, Dec. 17, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			JUN		
03...	1000	65.67	29...	1150	73.09
29...	1610	65.42	AUG		
FEB			20...	1130	71.94
27...	1650	68.47			
MAY					
23...	1510	74.50			

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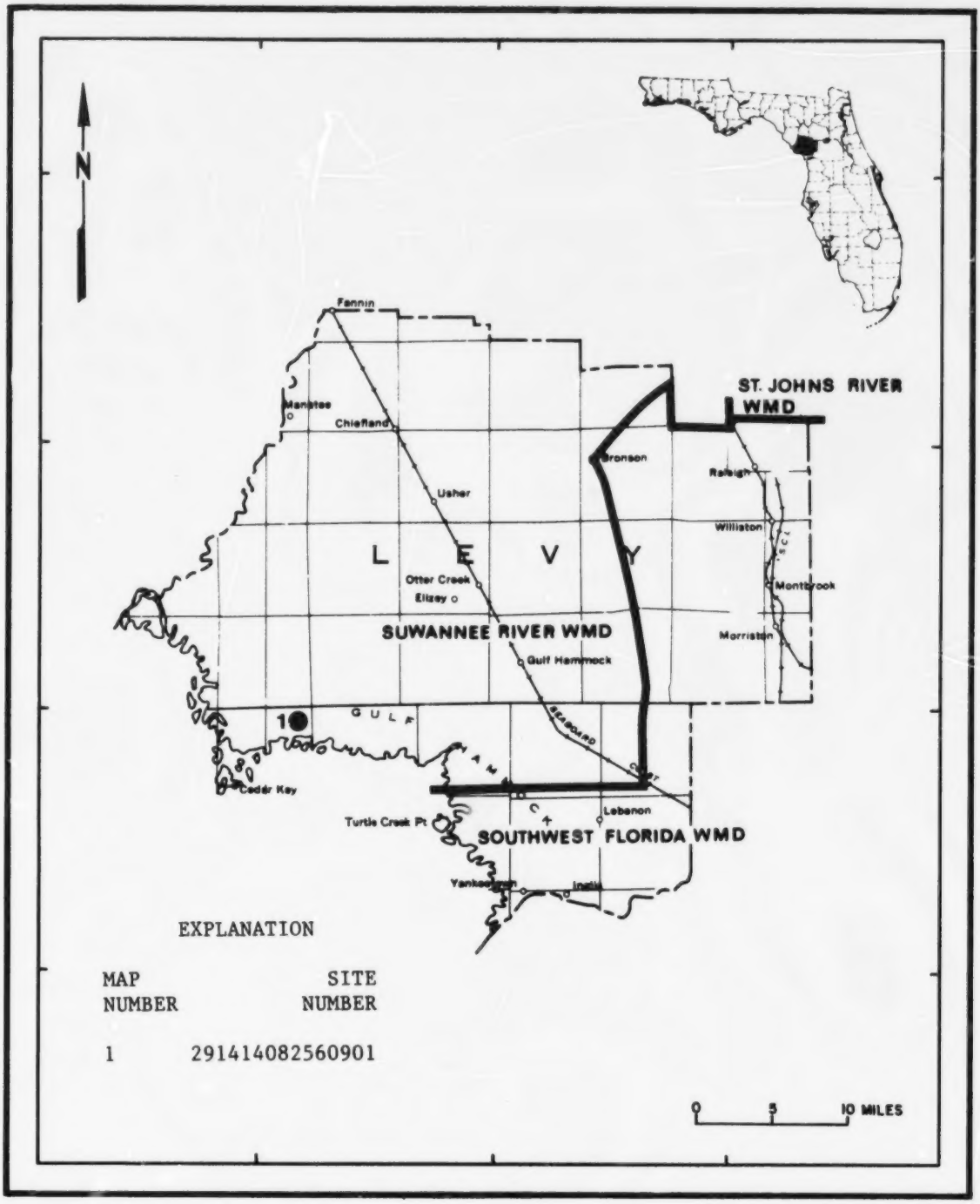

Figure 28. Location of wells in Levy County

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LEVY COUNTY

WELL NUMBER.--291414082560901. Rosewood Tower Well near Cedar Key, FL.

LOCATION.--Lat 29°14'14", long 82°56'09", in SE¼NW¼NW¼ sec.29, T.14 S., R.14 E., Hydrologic Unit 03110101, 50 ft north of SR 24 at Suwannee Lookout Tower, (Rosewood Tower) 9.4 mi northeast of Cedar Key and 11.6 mi southwest of Otter Creek.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 to 4 in., depth 442 ft, cased to 422 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 2.52 ft above land-surface datum.

DATUM.--Land-surface datum is 16.93 ft (5.16 m) National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.81 ft NGVD, Mar. 17, 1983; lowest, 8.59 ft NGVD, July 19, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.31	11.23	11.41	11.34	11.30	11.35	11.46	11.29	10.62	10.80	11.39	10.91
10	11.27	11.43	11.29	11.47	11.01	11.19	11.51	11.10	10.51	10.85	11.38	10.87
15	11.29	11.36	11.47	11.25	11.17	11.19	11.55	10.95	10.48	10.81	11.15	10.69
20	11.34	11.45	11.32	11.29	11.21	11.49	11.33	10.70	10.54	11.16	11.24	10.57
25	11.34	11.41	11.13	11.34	11.28	11.41	11.34	10.68	10.62	11.28	11.11	10.32
EOM	11.08	11.35	11.11	11.25	11.26	11.27	11.20	10.77	10.69	11.42	11.01	10.57
MEAN	11.28	11.32	11.34	11.28	11.22	11.33	11.38	10.93	10.57	11.02	11.23	10.65
MAX	11.42	11.51	11.63	11.47	11.46	11.71	11.55	11.37	10.69	11.42	11.42	10.98
MIN	11.06	11.07	11.05	11.10	10.97	11.19	11.20	10.62	10.46	10.66	11.01	10.29

WTR YR 1984 MEAN 11.13 MAX 11.71 MAR 28 MIN 10.29 SEP 26

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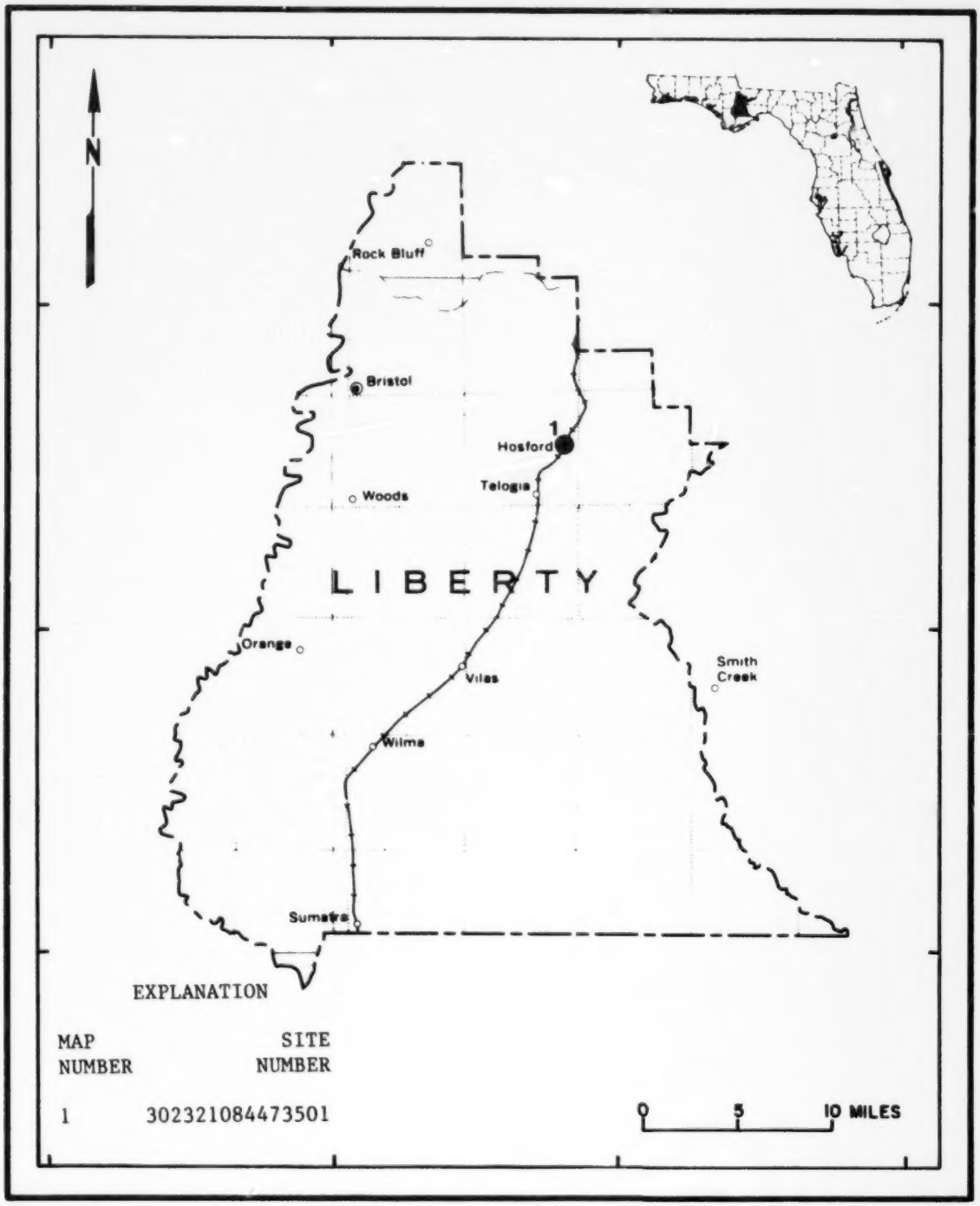

Figure 29. Location of wells in Liberty County

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LIBERTY COUNTY

WELL NUMBER.--302321084473501. C. W. Roberts Well at Hosford, FL.

LOCATION.--Lat 30°23'21", long 84°47'35", in NE¼NE¼SW¼ sec.13, T.1 S., R.6 W., Hydrologic Unit 03120003, north of State Highway 20, 0.4 mi east of intersection of State Highways 65 and 20 at Hosford.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 3 in., depth 85 ft, cased to 70 ft.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of tee, 0.80 ft above land-surface datum.

DATUM.--Land-surface datum is 87.01 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1961 to July 1964 (bimonthly); January 1965 to December 1974 (semiannually); January 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 91.91 ft NGVD, May 6, 1965; lowest measured, 86.38 ft NGVD, Dec. 16, 1974.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV 30...	1530	88.28	MAY 10...	1510	89.24
JAN 17...	1305	89.19	JUL 06...	1420	89.13
MAR 15...	1120	90.13	SEP 21...	1230	88.95

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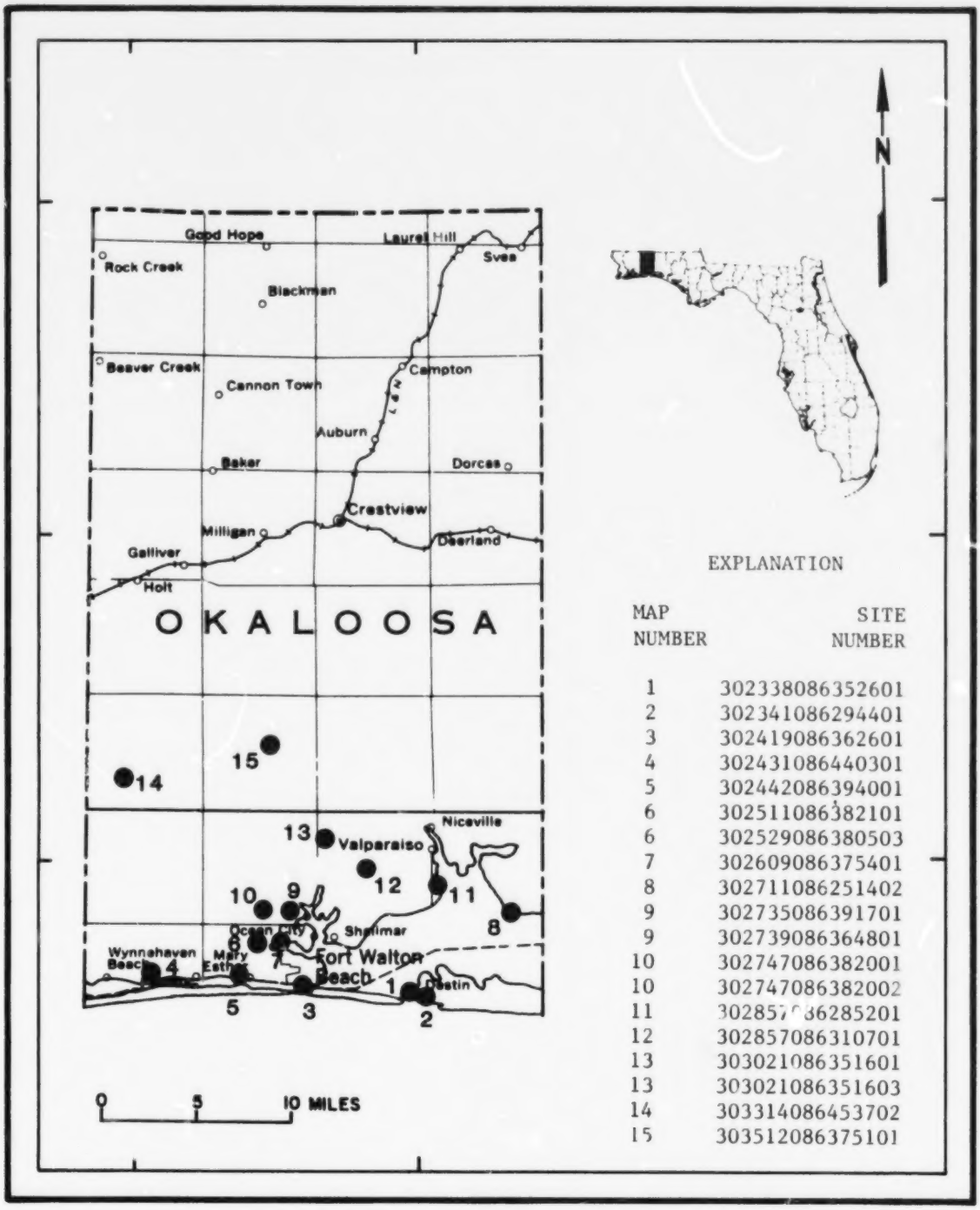

Figure 30. Location of wells in Okaloosa County

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OKALOOSA COUNTY

WELL NUMBER.--302336086352601. State of Florida wayside park well near Ft. Walton Beach, FL.

LOCATION.--Lat 30°23'38", long 86°35'26", in SE¼NE¼SW¼ sec. 19, T.2 S., R.23 W., Hydrologic Unit 03140105, at wayside park, 0.5 mi east of U.S. Highway 98 bridge over Choctawhatchee Bay, and 2.0 mi east of Fort Walton Beach, FL.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 5 in., depth 696 ft, cased to 474 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 1.0 ft above land-surface datum.

DATUM.--Altitude of land-surface is 12 ft from topographic map.

PERIOD OF RECORD.--July 1966, January 1967 (annually); April 1967 to May 1968; October 1968 to August 1970 (bimonthly); July 1974 (annually); March to November 1979 (bimonthly); July 1981 to March 1982 (semiannually); January 1983 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -31.60 ft NGVD, Mar. 4, 1968; lowest measured, -132.30 ft NGVD, Sept. 16, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV 23...	1030	-102.44	MAY 15...	0800	-105.34
JAN 19...	1200	-89.27	JUL 11...	0735	-116.29
MAR 27...	0850	-93.75	SEP 11...	0815	-104.50

WELL NUMBER.--302341086294401. Destin Water Users Inc. Well Number 1 at Destin, FL.

LOCATION.--Lat 30°23'41", long 86°29'44", in sec.*, T.2 S., R.23 W., Hydrologic Unit 03140103, in pumphouse, 0.2 mi north of intersection of State Highway 30B and U.S. Highway 98 at Destin.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 10 in., depth 657 ft, cased to 440 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of hole in pump base, 1.0 above land-surface datum.

DATUM.--Altitude of land-surface datum is 20 ft, from topographic map.

REMARKS.--*Land is not sectionized in this area.

PERIOD OF RECORD ELEVATIONS.--March 1975 to current year (bimonthly).

PERIOD OF RECORD WATER QUALITY.--March 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -10.22 ft NGVD, Mar. 10, 1975; lowest measured, -52.49 ft NGVD, Sept. 11, 1984.

ELEVATION, CONDUCTANCE AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV 23...	1000	-40.00	--	57	MAY 15...	0910	-42.85	580	58
JAN 19...	1307	-37.43	517	55	JUL 11...	0850	-51.64	550	76
MAR 27...	1153	-36.15	530	59	SEP 11...	0920	-52.49	545	53

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OKALOOSA COUNTY

WELL NUMBER.--302419086362601. Local number 3. Okaloosa County School Board Well at Fort Walton Beach, FL.

LOCATION.--Lat 30°24'19", long 86°36'26", in SE¼SE¼SW¼ sec.13, T.2 S., R.24 W., Hydrologic Unit 03140105, at Fort Walton Beach Elementary School near corner of intersection of 1st Street, Windham Avenue, and Eglin Parkway at Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 6 in, depth 668 ft, cased to 503 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of shelter floor, 2.00 ft above land-surface datum.

DATUM.--Land-surface datum is 16.44 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Extremes may have been exceeded during periods of missing record.

PERIOD OF RECORD.--August 1936, November 1946 (annually); April 1947 to July 1968 (bimonthly); January 1969 to May 1970 (semiannually); May 1971, July 1974 (annually); March 1975 to November 1977 (bimonthly); April 1978 to September 1980; October 1980 to September 1982 (bimonthly); October 1982 to current year. Records of water levels prior to November 1946 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.44 ft NGVD, Aug. 19, 1936; lowest, -112.05 ft NGVD, July 22, 1984.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5				---	-83.86	-80.95	-84.93	-92.98	-108.50	-108.59	-107.04	-100.63
10				---	-83.43	-81.41	-85.08	---	-109.52	-110.44	-103.82	-102.56
15				---	-83.07	-82.52	-84.43	---	-109.41	-109.61	-102.18	-101.96
20				-85.53	-82.78	-84.12	-86.02	-103.92	-109.78	-109.55	-102.21	-101.74
25				-85.00	-82.06	-84.43	-90.22	-104.69	-108.82	-108.91	-101.15	-101.29
EOM				-84.92	-81.73	-85.16	-91.75	-106.77	-108.07	-109.15	-100.42	-101.21
MEAN				-85.14	-83.06	-82.82	-86.68	-100.60	-108.94	-109.39	-103.21	-101.56
MAX				-84.80	-81.43	-80.92	-84.43	-92.16	-106.77	-107.87	-100.42	-100.14
MIN				-85.53	-84.82	-85.16	-91.75	-106.77	-110.37	-112.05	-108.46	-102.80

WTR YR 1984 MEAN -96.48 MAX -80.92 MAR 6 MIN -112.05 JUL 22

WELL NUMBER.--302431086440301. Bill Collier Well near Mary Esther, FL. (Formerly published as Richard Hall Well near Mary Esther.)

LOCATION.--Lat 30°24'31", long 86°44'03", in SW¼SE¼SE¼ sec.15, T.2 S., R.25 W., Hydrologic Unit 03140105, 0.2 mi south of U.S. 98 and 3.5 miles west of Mary Esther.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, domestic, artesian well, diameter 6 in., depth 820 ft, casing length unknown.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of 4 in. casing, 1.56 ft above land-surface datum.

DATUM.--Altitude of land-surface is 9 ft from topographic map.

REMARKS.--Extremes may have been exceeded during periods of missing record.

PERIOD OF RECORD.--February 1968 (annually); July 1978 to September 1982 (bimonthly); October 1982 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.00 ft NGVD Feb. 29, 1968; lowest, -53.04 ft NGVD, Sept. 10, 1984.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	---	---		---	-43.51	-46.44	---			---
10		---	---	---		---	-43.83	-47.91	---			-53.04
15		---	-44.54	---		---	-44.01	-49.72	---			---
20		---	-44.32	-45.31		---	-44.86	---	---			---
25		-45.44	---	---		-43.46	-44.91	---	---			-53.01
EOM		---	---	---		-43.83	-45.51	---	---			---
MEAN		-45.79	-44.37	-45.94		-43.46	-44.33	-47.90	-51.04			-52.79
MAX		-45.44	-44.15	-45.31		-43.01	-43.38	-45.60	-50.71			-52.39
MIN		-46.28	-44.54	-46.57		-43.83	-45.51	-51.01	-51.49			-53.04

WTR YR 1984 MEAN -46.16 MAX -43.01 MAR 28 MIN -53.04 SEP 10

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OKALOOSA COUNTY

WELL NUMBER.--302442086394001. Town of Mary Esther Well Number 2 at Mary Esther, FL.

LOCATION.--Lat 30°24'42", long 86°39'40", in NE¼NW¼SW¼ sec.16, T.2 S., R.24 W., Hydrologic Unit 30140105, at end of street, 0.3 mi east of water tower, 0.8 mi north of U.S. Highway 98 at Mary Esther.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter unknown, depth 764 ft, cased to 595 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of hole in pump base, 1.5 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 20 ft, from topographic map.

PERIOD OF RECORD ELEVATIONS.--February 1968, July 1974 (annually); March 1975 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

PERIOD OF RECORD WATER QUALITY.--March 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -36.44 ft NGVD, Mar. 10, 1975; lowest measured, -91.32 ft NGVD, May 16, 1984.

ELEVATION, CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV				
22...	1532	-76.38	562	58
JAN				
19...	1130	-76.78	532	58
MAR				
28...	1333	-76.42	550	59
MAY				
16...	0955	-91.32	560	58
JUL				
12...	0950	-88.13	550	59
SEP				
12...	0915	-89.53	595	57

WELL NUMBER.--302511086382101. City Well Number 3 at Fort Walton Beach, FL.

LOCATION.--Lat 30°25'11", long 86°38'21", in SE¼SE¼SW¼ sec.10, T.2 S., R.24 W., Hydrologic Unit 03140102, in pumphouse, southwest corner of intersection of Holmes Street and Wright Avenue at Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 16 in., depth 735 ft, cased to 548 ft.

DATUM.--Land-surface datum is 38.19 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Water quality records prior to October 1984 are in the files of the U. S. Geological Survey.

PERIOD OF RECORD.--Water Quality: May 1975 (annually); June 1978 (annually); July 1979 (annually); May 1984 to current year (semiannually).

CONDUCTANCE AND CHLORIDE DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)
MAY			
17...	1025	550	53

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OKALOOSA COUNTY

WELL NUMBER.--302529086380503. City of Fort Walton Beach Cemetary Well at Fort Walton Beach, FL.

LOCATION.--Lat 30°25'29", long 86°38'05", in NE¼NE¼SE¼ sec.10, T.1 S., R.24 W., Hydrologic Unit 03140102, at Memorial Cemetary in Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 6 in. (0-253 ft), 4 in. (253-1015 ft), depth 1149 ft, cased to 1015 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 1.45 ft above land-surface datum.

DATUM.--Land-surface datum is 34.86 ft National Geodetic Vertical Datum of 1929 (levels by Northwest Florida Water Management District).

REMARKS.--Extremes may have been exceeded during periods of missing record.

PERIOD OF RECORD.--December 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.80 ft NGVD, Mar. 18, 1981; lowest, -4.83 ft NGVD, Sept. 30 1984.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	-0.38	-0.24	-0.23	.48	.75	.45	-1.26	-2.55	-3.45	-3.97
10		---	-0.49	-0.01	-0.42	.10	.78	.04	-1.41	-2.79	-3.48	-4.04
15		---	-0.30	-0.47	-0.18	.25	.80	-0.20	-1.70	-3.06	-3.65	-4.20
20		---	-0.46	-0.63	-0.02	.86	.55	-0.46	-1.93	-3.11	-3.53	-4.32
25		-0.58	-0.77	-0.35	.03	.66	.51	-0.71	-2.07	-3.28	-3.75	-4.55
EOM		-0.66	-0.64	-0.52	-0.05	.40	.38	-1.13	-2.27	-3.27	-3.86	-4.83
MEAN		-0.46	-0.40	-0.39	-0.14	.43	.63	-0.25	-1.70	-2.94	-3.58	-4.27
MAX		-0.29	.04	-0.01	.50	1.16	.88	.67	-1.17	-2.36	-3.27	-3.86
MIN		-0.66	-0.77	-0.75	-0.64	-0.10	.38	-1.13	-2.27	-3.33	-3.86	-4.83

WTR YR 1984 MEAN -1.24 MAX 1.16 MAR 28 MIN -4.83 SEP 30

WELL NUMBER.--302609086375401. Okaloosa County School Board Well at Wright, FL.

LOCATION.--Lat 30°26'09", long 86°37'54", in SE¼SE¼SE¼ sec.3, T.2 S., R.24 W., Hydrologic Unit 03140105, at Wright Elementary School at Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 to 4 in, depth 640 ft, cased to 473 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of plywood floor, 1.10 ft above land-surface datum. June 24, 1975 to April 29, 1976, water-level recorder at same site and datum.

DATUM.--Land-surface datum is 20.82 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1975 to April 1976; April 1976 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, -34.30 ft NGVD, Mar. 5, 1976; lowest measured, -78.52 ft NGVD, Sept. 12, 1984.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			MAY		
22...	0930	-65.38	16...	1120	-76.04
JAN			JUL		
20...	1026	-67.68	13...	0915	-74.20
APR			SEP		
05...	1120	-64.18	12...	0945	-78.52

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OKALOOSA COUNTY

WELL NUMBER. -302711086251402. Local Number 24. U.S. Air Force Well near Villa Tasso, FL.

LOCATION.--Lat 30°27'11", long 86°25'14", SE¼SE¼NW¼ sec 35, T.1 S., R.22 W., Hydrologic Unit 03140102, at White Point Housing area behind Bldg. T-1628 near Villa Tasso.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 4 in., depth 425 ft, casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of steel plate, 0.50 ft below land-surface datum.

DATUM.--Altitude of land-surface datum is 10 ft, from topographic map.

PERIOD OF RECORD:--
ELEVATIONS: September 1977 to current year (bimonthly).
WATER QUALITY: October 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -3.02 ft NGVD, Mar. 9, 1978; lowest measured, -33.15 ft NGVD, July 10, 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Water level of 25 ft NGVD reported by driller, May 17, 1957.

ELEVATION, CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV					MAY				
22...	1150	-23.83	2060	540	16...	1710	-26.35	825	160
JAN					JUL				
18...	1410	-23.34	1630	430	10...	1650	-33.15	645	110
MAR					SEP				
27...	1520	-21.50	1600	400	11...	1645	-33.12	585	100

WELL NUMBER.--302735086371701. City Well Number 10 at Fort Walton Beach, FL.

LOCATION.--Lat 30°27'35", long 86°37'17", in NE¼NE¼NW¼ sec.35, T.1 S., R.24 W., Hydrologic Unit 03140102, at City of Fort Walton Beach Golf Course southwest corner of intersection of State Highway 189 and Mooney Road at Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 16 in., depth 800 ft, cased to 487 ft.

DATUM.--Altitude of land-surface datum is 47 ft from topographic map.

REMARKS.--Water quality records prior to October 1984 are in the files of the U. S. Geological Survey.

PERIOD OF RECORD.--Water Quality: May 1975 (annually); June 1978 (annually); May 1981 to current year (bimonthly).

CONDUCTANCE AND CHLORIDE DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV				MAY			
22...	1000	400	25	16...	1145	400	25
JAN				JUL			
20...	1135	377	27	13...	0950	390	25
MAR				SEP			
28...	1520	390	25	12...	1105	420	25

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OKALOOSA COUNTY

WELL NUMBER.--302739086364801. City Well Number 6 at Fort Walton Beach, FL.

LOCATION.--Lat 30°27'39", long 86°36'48", in SE¼NE¼NE¼ sec.35, T.1 S., R.24 W., Hydrologic Unit 03140102, near 18th green of Fort Walton Beach golf course, 0.2 mi south of State Highway 189, and about 3 mi north of Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 24 in, depth 750 ft, cased to 500 ft.

DATUM.--Land-surface datum is 36.04 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD WATER QUALITY.--1977 (semiannually); May 1978 to current year (bimonthly).

CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV				MAY			
22...	1005	400	29	16...	1155	345	21
JAN				JUL			
20...	1140	320	21	13...	1000	325	15
MAR							
28...	1530	390	30				

WELL NUMBER.--302747086382001. USGS Observation Well at Wright, FL.

LOCATION.--Lat 30°27'47", long 86°38'20", in NE¼NE¼NW¼ sec.34, T.1 S., R.24 W., Hydrologic Unit 03140102, 200 ft west of North Beal Street, 0.4 mi north of intersection of North Beal Street and State Highway 189, and about 3 mi north of Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 10 in., depth 858 ft, cased to 503 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 3.12 ft above land-surface datum.

DATUM.--Land-surface datum is 57.67 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--August 1966 to February 1981; March 1981 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.60 ft NGVD, Feb. 5, 1967 estimated; lowest measured, -69.11 ft NGVD, July 28, 1982.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			MAY		
22...	0940	-55.37	16...	1020	-61.30
JAN			JUL		
20...	1125	-55.36	13...	1030	-64.57
MAR			SEP		
28...	1510	-51.38	12...	1015	-66.96

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OKALOOSA COUNTY

WELL NUMBER.--302747086382002. USGS Observation Well at Wright, FL.

LOCATION.--Lat 30°27'47", long 86°38'20", in NE¼NE¼NW¼ sec.34, T.1 S., R.24 W., Hydrologic Unit 03140102, 200 ft west of North Beal Street, 0.4 mi north of intersection of North Beal Street and State Highway 189, and about 3 mi north of Fort Walton Beach.

AQUIFER.--Northwestern Floridan sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, test, observation well, diameter 2 in, depth 38 ft, cased to 23 ft, screened from 23 to 38 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 0.50 above land-surface datum.

DATUM.--Altitude of land-surface datum is 58 ft, from topographic map.

PERIOD OF RECORD.--July 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 56.12 ft NGVD, Mar. 9, 1978; lowest measured, 52.05 ft NGVD, July 26, 1977.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
22...	0945	53.43	16...	1015	53.46
JAN			JUL		
20...	1130	54.23	13...	1025	52.84
MAR			SEP		
28...	1500	54.17	12...	1010	53.62

WELL NUMBER.--302857086285201. U.S. Air Force Postil Point Well, near Niceville, FL.

LOCATION.--Lat 30°28'57", long 86°28'52", in NW¼NE¼SE¼ sec.19, T.1 S., R.22 W., Hydrologic Unit 03140102, at Postil Point on Eglin Air Force Base, behind Eglin Kindergarten School, and about 3 mi south of Niceville.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 6 in., depth 508 ft, cased to 300 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of reducer, 2.30 ft above land-surface datum.

DATUM.--Land-surface datum is 7.54 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1947 to July 1964 (bimonthly); January 1965 to May 1970 (semiannually); January 1971, July 1974 (annually); January 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.74 ft NGVD, Sept. 3, 1947; lowest measured -58.35 ft NGVD, July 12, 1984.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
22...	1450	-41.75	17...	0900	-53.80
JAN			JUL		
18...	1435	-39.51	12...	1250	-58.35
MAR			SEP		
29...	0900	-38.16	12...	1305	-54.34

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OKALOOSA COUNTY

WELL NUMBER.--302857086310701. U.S. Air Force Hardstand Tower Well near Valparaiso, FL.

LOCATION.--Lat 30°28'57", long 86°31'07", in NW¼NW¼SE¼ sec.23, T.1 S., R.23 W., Hydrologic Unit 03140102, on Eglin Air Force Base about 1.5 mi south of Valparaiso.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 8 in, depth 702 ft, cased to 404 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of hole in steel plate, 1.0 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 66 ft from topographic map.

PERIOD OF RECORD.--March 1978 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -22.0 ft NGVD, Mar. 7, 1978; lowest measured, -61.12 ft NGVD, July 12, 1984.

EXTREMES OUTSIDE PERIOD OF RECORD.--Water level reported as 20.5 ft NGVD by driller in January 1958.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
JAN			JUL		
18...	1455	-37.00	12...	1400	-61.12
MAR			SEP		
29...	1010	-42.41	12...	1350	-58.44
MAY					
17...	1000	-48.58			

WELL NUMBER.--303021086351601. U.S. Air Force Field 4 Well near Fort Walton Beach, FL.

LOCATION.--Lat 30°30'21", long 86°35'16", in NE¼NE¼NW¼ sec.18, T.1 S., R.23 W., Hydrologic Unit 03140102, at auxiliary field 4, about 6 mi north of Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, public-supply, artesian well, diameter 10 in., depth 591 ft, cased to 442 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 1 in. hole in pump base, 1.0 ft above land-surface datum.

DATUM.--Land-surface datum is 89.33 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--Jan. 1948 to Sept. 1967 (bimonthly); March 1978 (annually); Jan. to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.33 ft NGVD, Apr. 14, 1948; lowest measured, -27.34 ft NGVD, Sept. 12, 1984.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			MAY		
22...	1020	-20.57	16...	1225	-26.07
JAN			JUL		
20...	1155	-21.70	12...	1600	-26.52
MAR			SEP		
28...	1555	-17.23	12...	1455	-27.34

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OKALOOSA COUNTY

WELL NUMBER.--303021086351603. U.S. Air Force Field 4 Deep Well near Fort Walton Beach, FL.

LOCATION.--Lat. 30°30'21", long 86°35'16", in NE¼NE¼NW¼ sec.18, T.1 S., R.23 W., Hydrologic Unit 03140102, at auxillary field 4, about 6 mi north of Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Teritary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 4 in, depth 1380 ft, cased to 938 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of plywood shelf, 0.3 ft above land-surface datum. Prior to July 1981, water-level recorder at same site and datum.

DATUM.--Altitude of land-surface datum is 88 ft, from topographic map.

PERIOD OF RECORD.--December 1980 to July 1981; July 1981 to current year (bimonthly). Records of water levels prior to July 1981 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -7.20 ft NGVD, Mar. 19, 1981; lowest measured -27.38 ft Sept. 12, 1984.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
22...	1013	-20.78	16...	1215	-23.27
JAN			JUL		
20...	1150	-20.28	12...	1550	-26.62
MAR			SEP		
28...	1550	-17.43	12...	1435	-27.38

WELL NUMBER.--303314086453702. U.S. Air Force Metts Tower Well near Fort Walton Beach, FL.

LOCATION.--Lat 30°33'14", long 86°45'37", in SW¼SW¼SE¼ sec.28, T.1 N., R.25 W., Hydrologic Unit 03140103, at Metts Tower on Eglin Air Force Base about 10 mi northwest of Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 796 ft, cased to 600 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of sanitary seal, 0.5 ft below land-surface datum.

DATUM.--Altitude of land-surface datum is ft from topographic map.

PERIOD OF RECORD.--April 1978 (annually); Nov. 1978 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.75 ft NGVD, Mar. 11, 1979; lowest measured, 23.16 ft NGVD, July 12, 1984.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
22...	1100	25.85	16...	1435	25.81
JAN			JUL		
20...	1235	26.23	12...	1730	23.16
MAR			SEP		
28...	1735	26.92	12...	1625	23.71

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OKALOOSA COUNTY

WELL NUMBER.--303512086375101. Local Number 29. U.S. Air Force Observation Well near Fort Walton Beach, FL.

LOCATION.--Lat 30°35'12", long 86°37'51", in NW¼NE¼SE¼ sec.15, T.1 N., R.24 W., Hydrologic Unit 03140102, at U.S.A.F. Field 5, 6.4 mi southwest of State Highway 85, 8.3 mi north of State Highway 189, and 14 mi north of Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, public-supply, artesian well, diameter 10 in, depth 710 ft, cased to 524 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 1.06 ft above land-surface datum.

DATUM.--Land-surface datum is 178.03 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Extremes may have been exceeded during periods of missing record.

PERIOD OF RECORD.--October 1947 to May 1966 (bimonthly); May 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 78.23 ft NGVD, Oct. 28, 1947; lowest, 8.14 ft NGVD, Sept. 30, 1984.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.13	11.81	12.30	12.55	12.60	13.35	13.71	13.43	11.56	---		---
10	11.98	11.99	12.31	12.81	12.48	13.14	13.82	13.13	11.21	---		---
15	11.86	11.99	12.56	12.51	12.63	13.20	13.82	12.92	10.99	9.63		8.73
20	11.61	12.20	12.52	12.27	12.83	13.75	13.65	12.57	10.67	9.63		8.58
25	11.89	11.96	12.40	12.54	12.85	13.66	13.61	12.22	10.55	9.41		8.33
EOM	11.69	12.04	11.04	12.15	12.89	13.41	13.35	11.76	---	---		8.14
MEAN	11.91	11.91	12.35	12.23	12.69	13.39	13.68	12.76	11.06	9.58		8.47
MAX	12.16	12.26	12.94	12.81	13.28	13.95	13.85	13.65	11.71	9.69		8.77
MIN	11.60	10.98	11.04	11.03	12.23	12.91	13.35	11.76	10.49	9.41		8.14

WTR YR 1984 MEAN 12.10 MAX 13.95 MAR 28 MIN 8.14 SEP 30

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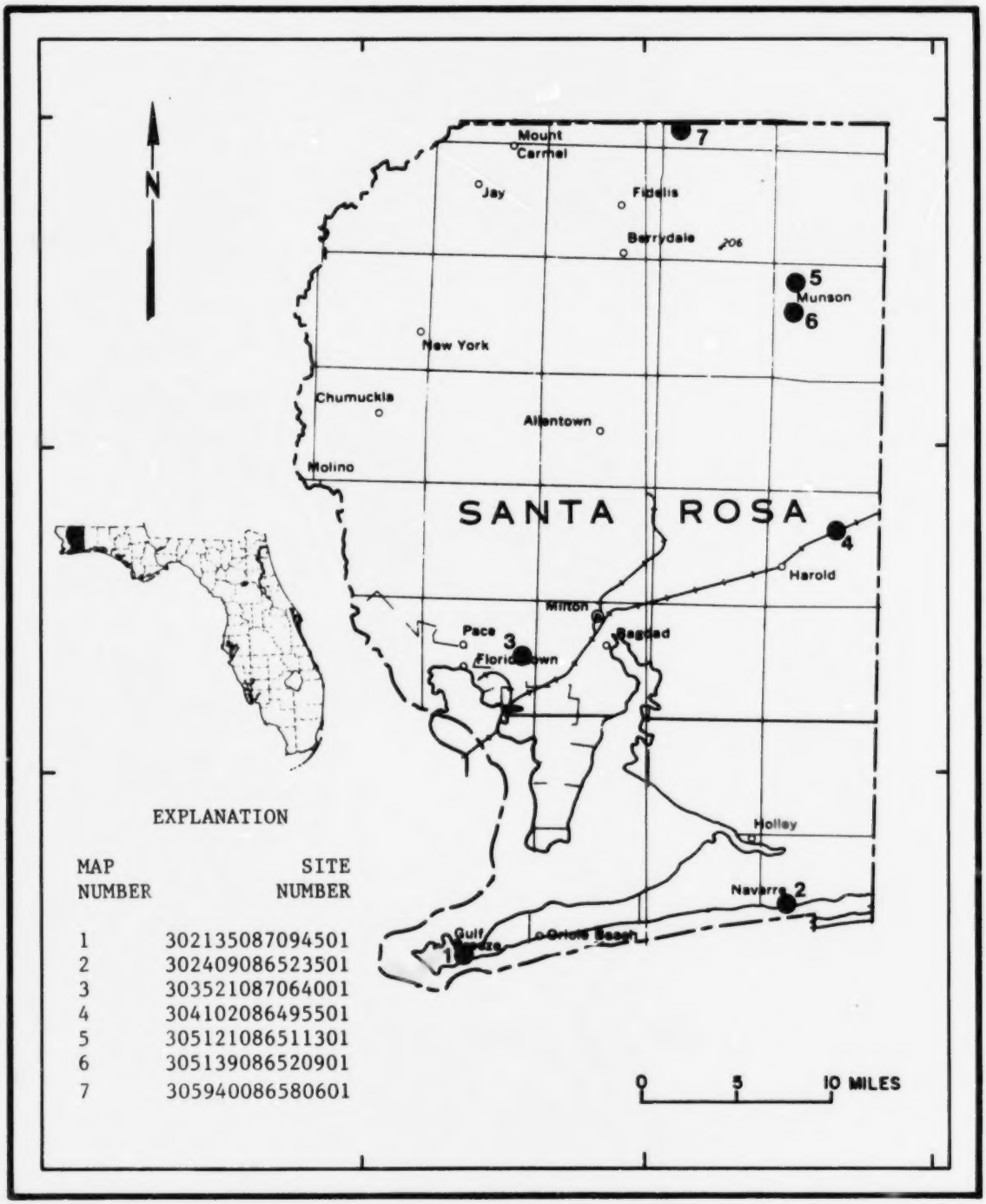

Figure 31. Location of wells in Santa Rosa County

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SANTA ROSA COUNTY

WELL NUMBER.--302135087094501. Local number 102. USGS Observation Well at Gulf Breeze, FL.

LOCATION.--Lat 30°21'35", long 87°09'45", in NE¼SW¼SE¼ sec.4, T.3 S., R.29 W., Hydrologic Unit 03140105, south of McClure Drive, 0.25 mi north of U.S. Highway 98 and McClure Drive intersection at Gulf Breeze.

AQUIFER.--Sand aquifer of Pleistocence age, Geologic Unit 112 SAND.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 41 ft, cased to 31 ft, screened from 31 to 41 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of cap, 1.09 ft below land-surface datum.

DATUM.--Land-surface datum is 11.56 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--August 1950 to May 1951 (weekly); May 1951 to September 1964; May 1965 to May 1971 (annually); January 1972 to November 1975 (semiannually); December 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.14 ft NGVD, Nov. 15, 1975; lowest, 0.98 ft NGVD, Jan. 17, 1955.

ELEVATION, IN FEET, NGVD, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			JUL		
10...	0905	6.67	05...	1115	5.07
JAN			17...	1045	6.99
11...	1130	7.02			

WELL NUMBER.--302409086523501. Louis Woodham Cement Plant Well at Navarre, FL.

LOCATION.--Lat 30°24'09", long 86°52'35", in NE¼NE¼SW¼ sec.20, T.2 S., R.26 W., Hydrologic Unit 03140105, 200 ft west of intersection of State Highway 87 and U.S. Highway 98, and 450 ft north of U.S. Highway 98 at Navarre.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, industrial, artesian well, diameter 3 in, depth 940 ft, cased to 800 ft.

INSTRUMENTATION.--Tape measured. Reference point: Top of hole in casing, 0.38 ft below land-surface datum. Prior to May 1975, measuring point: Top of reducer coupling at land surface datum.

DATUM.--Altitude of land-surface datum is 20 ft, from topographic map.

PERIOD OF RECORD.--March 1961, July 1966 (annually); November 1966 to May 1968 (bimonthly); May 1969 to May 1974 (semiannually); January 1975 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 60.0 ft NGVD, Mar. 1, 1961; lowest measured, -13.48 ft NGVD, July 5, 1984.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
10...	1200	-9.94	02...	1500	-7.66
JAN			JUL		
11...	1150	-8.98	05...	1140	-13.48
MAR			17...	1110	-12.66
08...	1555	-6.33			

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SANTA ROSA COUNTY

WELL NUMBER.--303521087064001. Local number 035-706-1. USGS Observation Well near Milton, FL.

LOCATION.--Lat 30°35'21", long 87°06'40", in SW¼SE¼SW¼ sec.13, T.1 N., R.29 W., Hydrologic Unit 03140104, 0.9 mi south of U.S. Highway 90, 2.25 mi west of intersection of U.S. Highway 90 and State Highway 191A, and 4.9 mi southwest of Milton.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 211 ft, cased to 206 ft, screened from 206 to 211 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 3.00 ft above land-surface datum.

DATUM.--Land-surface datum is 127.28 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1959 to October 1962; November 1962 to February 1967 (monthly); July 1967 to May 1968 (bimonthly); January 1969 to May 1971 (semiannually); January 1972 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.31 ft NGVD, Aug. 26, 27, 1961; lowest measured, 28.44 ft NGVD, July 9, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			APR		
16...	1514	36.80	24...	1707	37.16
JAN			JUL		
23...	1610	36.42	27...	0818	37.30

WELL NUMBER.--304102086495501. Local number 041-649-1. USGS Observation Well at Floridale, FL.

LOCATION.--Lat 30°41'02", long 86°49'55", in NE¼NW¼NE¼ sec.15, T.2 N., R.26 W., Hydrologic Unit 03140103, 22 ft north of U.S. Highway 90, 0.3 mi east of town of Floridale, and 3.3 mi east of Harold.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in, depth 98 ft, cased to 93 ft, screened from 93 to 98 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of coupling, 3.05 ft above land-surface datum. Prior to September 20, 1962 water-level recorder at same site and datum.

DATUM.--Land-surface datum is 155.76 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--August 1959 to September 1962; September 1962 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 105.04 ft NGVD, Jan. 17, 1976; lowest measured, 82.46 ft NGVD, May 6, 1969.

ELEVATION, IN, FEET NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			APR		
18...	1344	94.93	27...	1356	94.68
FEB			JUL		
06...	1138	94.59	27...	1220	95.11

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SANTA ROSA COUNTY

WELL NUMBER.--305121086511301. Local Number Jay 3. U.S. Geological Survey Observation Well near Munson, FL.

LOCATION.--Lat 30°51'21", long 86°51'13", in SW¼NW¼NW¼ sec. 16, T.4 N., R.16 W., Hydrologic Unit 03140104, about 50 ft north of State Highway 4, 1.15 mi east of intersection of State Highways 191 and 4 at Munson.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Teritary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 4 in., depth 46 ft, cased to 41 ft, screened from 41 to 46 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 2.6 ft above land-surface datum.

DATUM.--Land-surface datum is 99.88 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1978 (annually); November 1978 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 97.34 ft NGVD, July 26, 1978; lowest measured 94.04 ft Nov. 18, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			APR		
17...	1520	94.55	30...	1525	95.56
JAN			JUN		
09...	1620	95.16	26...	1510	95.35
FEB			AUG		
28...	1715	95.40	23...	1545	95.35

WELL NUMBER.--305139086520901. Local Number Jay 4. Florida Forest Service Well at Munson, FL.

LOCATION.--Lat 30°51'39", long 86°52'09", in SW¼SW¼SW¼ sec.8, T.4 N., R.26 W., Hydrologic Unit 03140104, 0.24 mi north of State Road 4 at Munson Nursery at Munson.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, irrigation well, diameter 18 to 8 in, depth 445 ft, cased to 385 ft, screened from 385 to 435 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 1 in nipple in pump base, 2.00 ft above land-surface datum.

DATUM.--Land-surface datum is 215.30 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1978 to September 1981 (bimonthly); January 1982 (annually); November 1982 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.90 ft NGVD, Mar. 2, 1984; lowest measured, 52.97 ft NGVD, Jan. 21, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Water level of 103.3 ft NGVD, reported by driller on Apr. 11, 1952.

ELEVATION, IN FEET, NGVD, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			MAY		
17...	1505	75.59	01...	1335	74.41
JAN			01...	1345	73.97
09...	1630	77.03	JUN		
MAR			26...	1530	76.72
02...	0950	81.90			

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SANTA ROSA COUNTY

WELL NUMBER.--305940086580501. Florida Forest Service Observation Well near Jay, FL.

LOCATION.--Lat 30°59'40", long 86°58'06", in NW¼SW¼SW¼ sec.29, T.6 N., R.27 W., Hydrologic Unit 03140104, at Camp Henderson Fire Tower, on clay road 5.4 mi east of State Highway 87, and 11 mi northeast of Jay.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 to 3 in., depth 825 ft, cased to 510 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of cap, 0.80 ft above land-surface datum.

DATUM.--Altitude of land surface datum is 280 ft, from topographic map.

PERIOD OF RECORD.--July 1961 (annually); July 1966 to November 1967 (bimonthly); January 1968 to May 1969 (semi annually); January 1974 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 128.00 ft NGVD, July 14, 1961; lowest measured, 111.10 ft NGVD, July 27, 1984.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			APR		
18...	1048	111.13	27...	1039	111.35
FEB			JUL		
06...	1423	111.33	27...	0938	111.10

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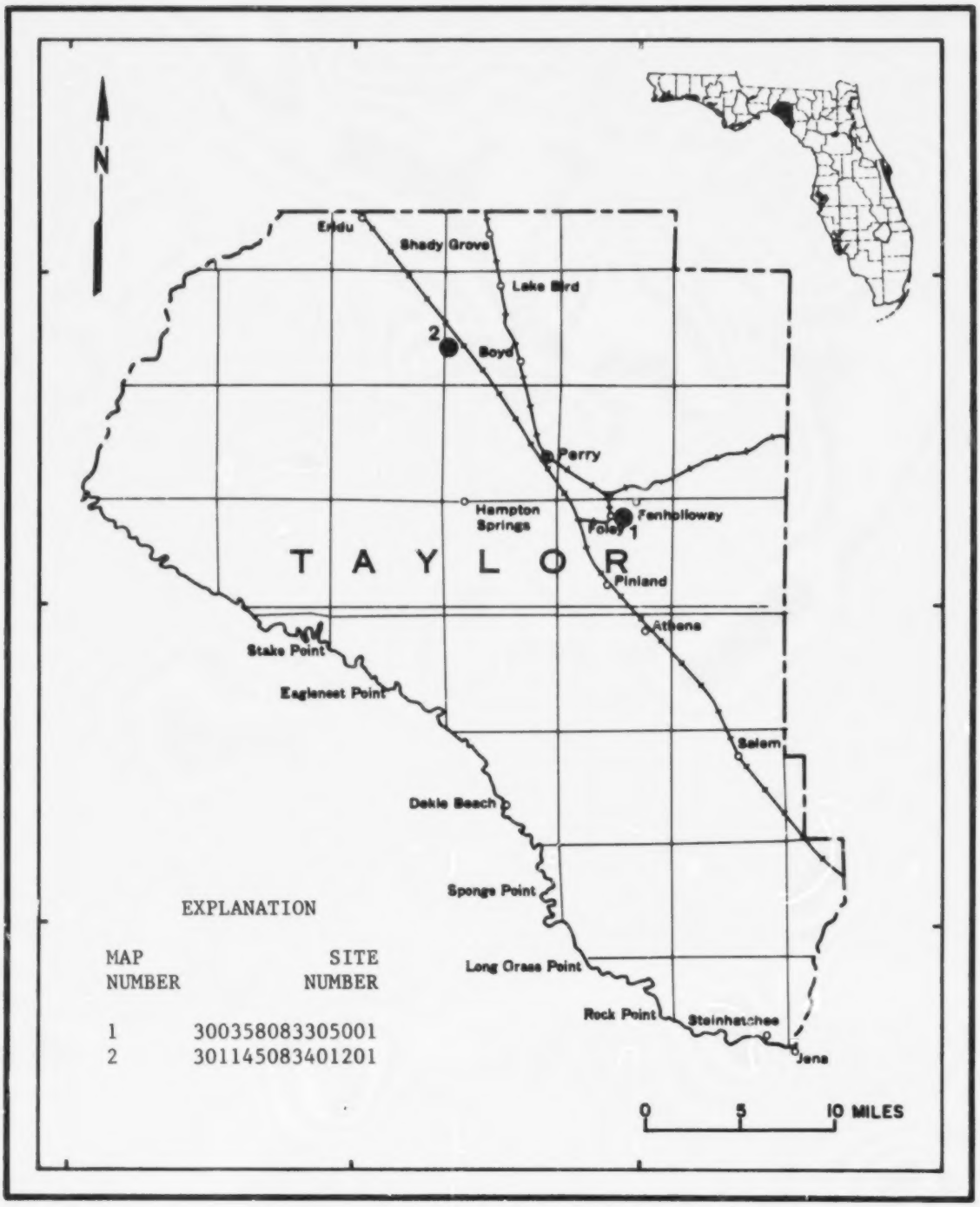

Figure 32. Location of wells in Taylor County

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TAYLOR COUNTY

WELL NUMBER.--300358083305001. Local Number Taylor 35. Buckeye Cellulose Corporation Well near Fenholloway, FL.

LOCATION.--Lat 30°03'58", long 83°30'50", in NE¼SE¼NW¼ sec.10, T.5 S., R.8 E., Hydrologic Unit 03110102, 1.5 mi southwest of Fenholloway and 5.3 mi southeast of Perry.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 17 to 12 in., depth 230 ft, cased to 189 ft.

INSTRUMENTATION.--Water-level recorder. Reference point: Top of recorder shelf, 2.40 ft above land-surface datum.

DATUM.--Land-surface datum is 54.69 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1946 to current year.

REMARKS.--Water levels affected by pumping of nearby wells.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 55.38 ft NGVD, Apr. 2, 1948; lowest, 12.19 ft NGVD, May 15, 1974.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	31.79	29.36	28.79	30.11	29.96	29.40	31.58	31.31	30.00	37.14	34.18	31.94
10	31.29	28.93	28.67	30.18	29.75	30.11	32.52	30.91	29.62	29.45	33.63	42.10
15	30.93	28.56	28.87	29.91	29.61	30.27	32.71	30.53	29.31	29.48	33.00	44.02
20	30.58	28.42	28.93	29.72	29.48	30.30	32.40	30.16	29.00	32.36	32.66	43.41
25	30.20	28.68	31.66	29.67	29.33	30.04	32.11	29.93	28.88	34.44	32.37	32.22
EOM	29.74	28.84	29.63	29.94	29.33	30.36	31.74	30.19	28.82	34.69	32.16	31.60
MEAN	30.89	28.84	29.35	29.89	29.64	30.02	32.25	30.56	29.35	31.70	33.17	36.16
MAX	32.17	29.67	38.92	30.18	30.04	30.41	37.18	31.66	30.21	37.14	34.94	44.02
MIN	29.74	28.26	28.67	29.64	29.27	29.33	30.38	29.85	28.67	28.96	32.16	31.60

WTR YR 1984 MEAN 30.98 MAX 44.02 SEP 15 MIN 28.26 NOV 19

WELL NUMBER.--301145083401201. Gibson Still Well near Boyd, FL.

LOCATION.--Lat 30°11'45", long 83°40'12", in NW¼SW¼NW¼ sec.30, T.3 S., R.7 E., Hydrologic Unit 03110102, 1.0 mi west of U.S. Highway 98, about 4 mi west of Boyd and 7.6 mi northwest of Perry.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 to 6 in, depth 140 ft, length of casing unknown.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 2.4 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 46 ft, from topographic map.

PERIOD OF RECORD.--August 1975 to current year. (Discontinued.)

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.79 ft NGVD, Apr. 4, 1984; lowest, 36.15 ft NGVD, July 31, 1977.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	39.26	38.82	40.78	41.78	42.14	41.42	42.62	40.72	40.08	40.71	41.47	
10	40.60	39.24	40.62	41.57	41.66	41.81	42.64	40.38	39.44	39.80	40.89	
15	40.42	38.75	41.79	41.33	41.79	41.43	42.13	39.93	38.95	39.64	40.65	
20	39.80	40.33	41.42	41.71	41.48	41.93	41.70	39.48	38.59	42.16	41.05	
25	39.56	41.53	41.14	41.90	41.37	41.34	41.50	40.43	39.12	42.24	---	
EOM	39.04	40.96	42.10	41.82	41.81	42.09	41.06	41.23	40.51	42.27	---	
MEAN	39.76	39.64	41.39	41.71	41.74	41.73	41.99	40.37	39.41	40.99	41.13	
MAX	40.61	41.53	42.39	42.43	42.31	42.54	42.79	41.57	40.89	42.29	42.07	
MIN	39.04	38.58	40.62	41.29	41.29	41.20	41.06	39.39	38.59	39.44	40.43	

WTR YR 1984 MEAN 40.89 MAX 42.79 APR 4 MIN 38.58 NOV 19

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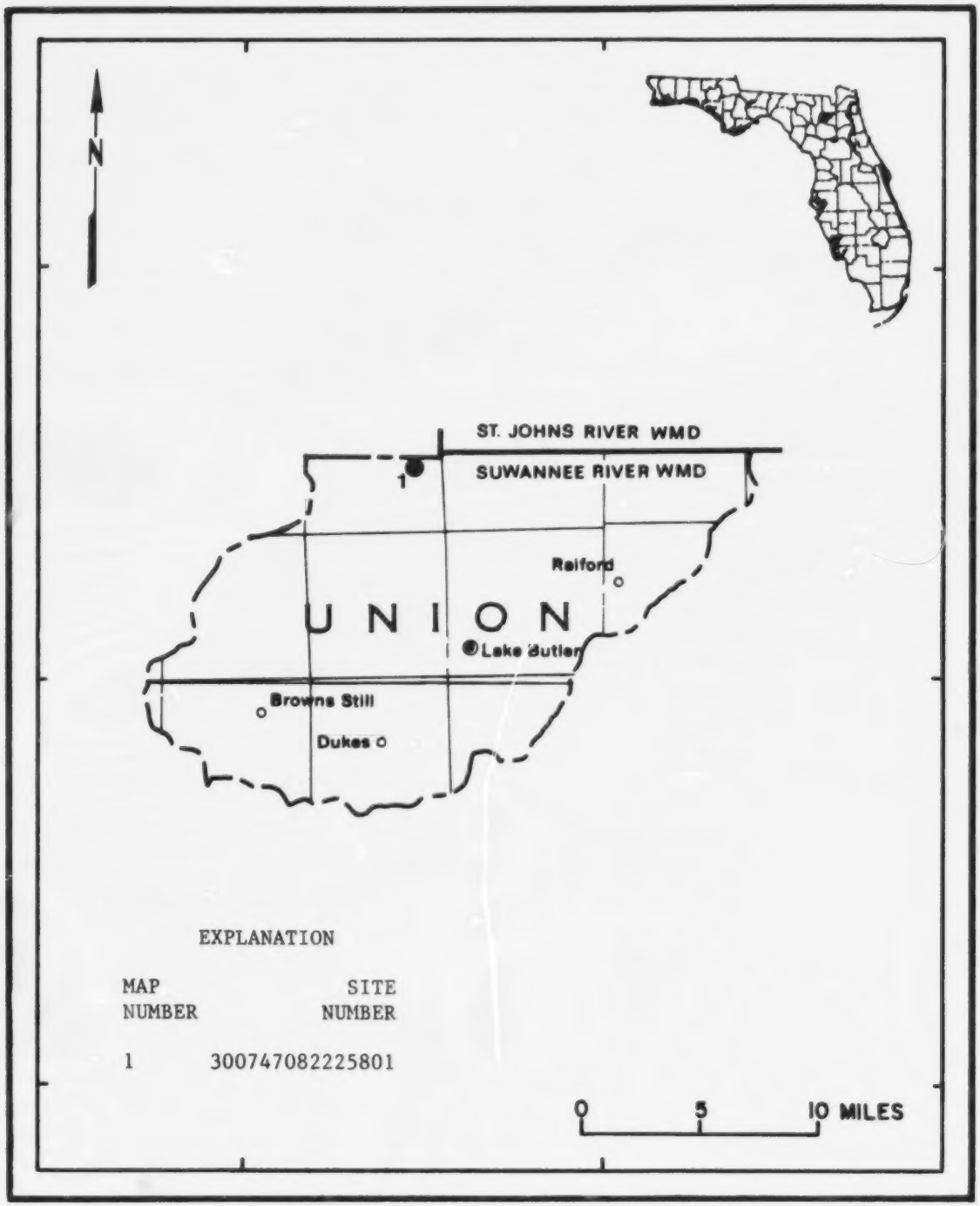

Figure 33. Location of wells in Union County

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UNION COUNTY

WELL NUMBER.--300747082225801. USGS Observation Well near Lake Butler, FL.

LOCATION.--Lat 30°07'47", long 82°22'58", in SE¼NW¼SE¼ sec.23, T.4 S., R.19 E., Hydrologic Unit 03110206, about 40 ft east of State Highway 231, 0.8 mi south of Union-Baker county line, and 7.6 mi north of Lake Butler.

AQUIFER.--Florida aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 8 in., depth 724 ft, cased to 694 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 3.07 ft above land-surface datum.

DATUM.--Land-surface datum is 152.75 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--November 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 66.76 ft NGVD, Mar. 29, 30, 1965; lowest, 53.30 ft NGVD, Aug. 10, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	58.55	58.37	58.25	59.36	59.84	60.59	62.54	62.86	60.68	59.34	59.28	58.71
10	58.47	58.45	58.07	59.69	59.60	60.66	62.94	62.37	60.31	59.19	59.35	58.71
15	58.38	58.34	58.39	59.45	59.89	60.96	63.36	61.96	60.03	59.06	59.10	58.54
20	58.41	58.41	58.37	59.48	60.02	61.59	63.23	61.49	59.82	59.05	59.10	58.50
25	58.44	58.29	58.32	59.66	60.08	61.67	63.28	61.19	59.78	59.10	58.90	58.31
EOM	58.17	58.14	58.54	59.65	60.14	61.95	63.03	60.93	59.54	59.28	58.83	58.41
MEAN	58.42	58.28	58.35	59.46	59.91	61.15	62.98	61.89	60.11	59.19	59.11	58.53
MAX	58.55	58.45	58.76	59.80	60.37	62.27	63.43	63.06	60.84	59.49	59.36	58.81
MIN	58.17	58.10	58.07	58.64	59.49	60.15	62.00	60.93	59.54	59.01	58.83	58.28

WTR YR 1984 MEAN 59.78 MAX 63.43 APR 23 MIN 58.07 DEC 9 AND OTHERS

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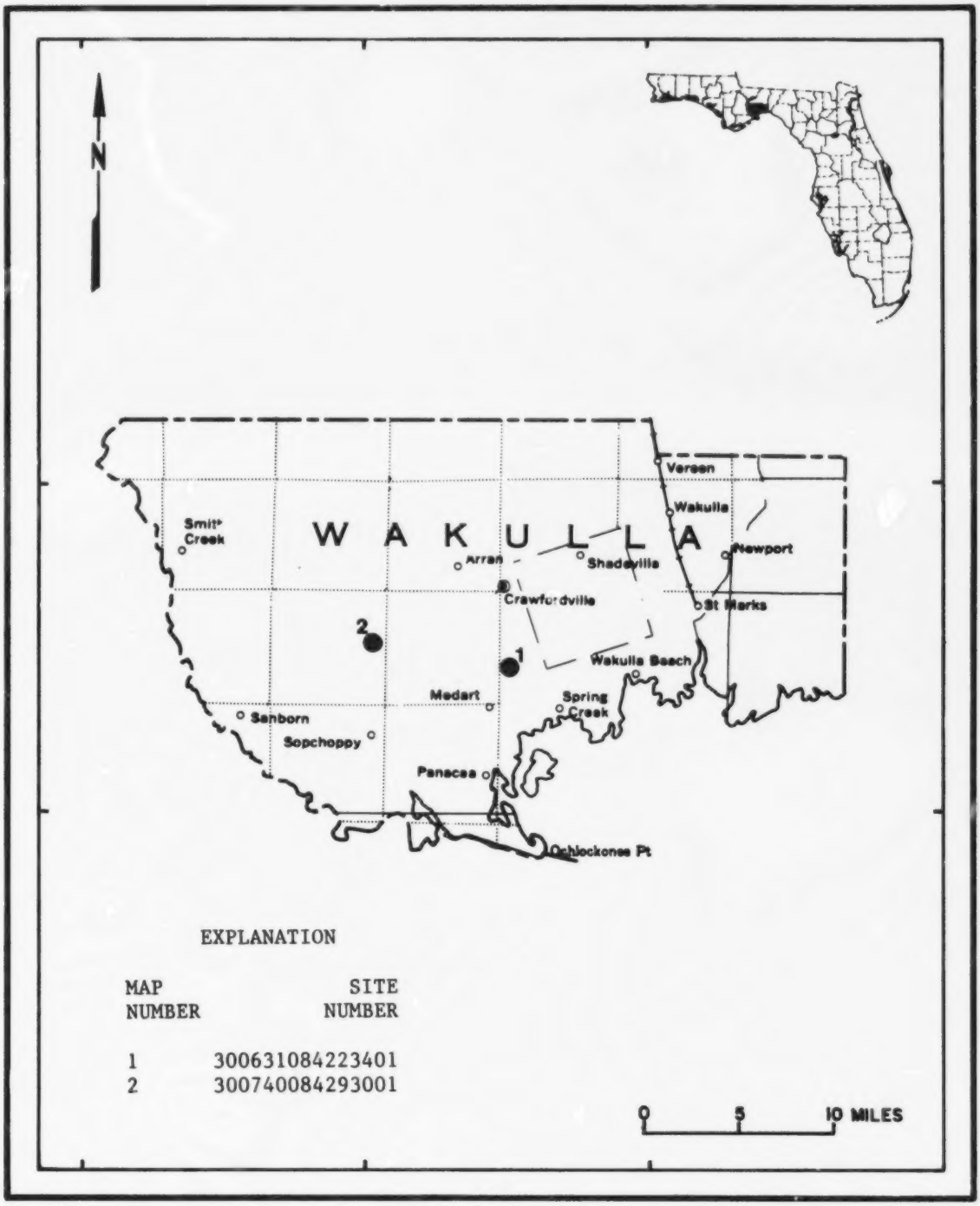

Figure 34. Location of wells in Wakulla County

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WAKULLA COUNTY

WELL NUMBER.--300631084223401. Wakulla High Test Well. Wakulla County School Board Well near Medart, FL.

LOCATION.--Lat 30°06'31", long 84°22'34", in Land Grant Number 91 of Hartsfield Survey, Hydrologic Unit 03120001, .25 mi east of intersection of U.S. 98 and SR 61, 5 mi south of Crawfordville.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 4 in., depth 221 ft, cased 70 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 4 in. casing, 0.8 ft above land-surface datum.

DATUM.--Land-surface datum is 36.15 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--December 1974 to September 1981 (bimonthly); October 1981 to September 1982 (monthly); November 1982 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.52 ft NGVD, Aug. 7, 8, 1982; lowest measured, 3.53 ft NGVD, Feb. 7, 1978.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV 30...	1245	5.55	MAY 16...	1655	5.47
JAN 17...	0950	5.40	JUL 11...	1220	5.24
MAR 15...	1700	5.00	AUG 23...	1530	6.66

WELL NUMBER.--300740084293001. USGS Observation Well near Crawfordville, FL.

LOCATION.--Lat 30°07'40", long 84°29'30", in NW¼NE¼NW¼ sec.24, T.4 S., R.3 W., Hydrologic Unit 03120003, 400 ft east of Sopchoppy River, 6.6 mi southwest of intersection of Forest Road 365 and State Highway 315, and 7.8 mi west of Crawfordville.

AQUIFER.--Hawthorn Limestone aquifer of the Miocene System, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, bench mark, artesian well, diameter 6 in depth 127 ft, cased to 121 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 2.90 ft above land-surface datum.

DATUM.--Land-surface datum is 46.91 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--January 1967 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.91 ft NGVD, July 31, 1975; lowest, 24.42 ft NGVD, Sept. 14, 1966.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.27	31.64	32.94	33.45	33.64	33.55	35.67	32.51	32.76	34.04	34.57	32.95
10	32.10	31.62	32.81	33.12	33.42	33.85	35.64	32.31	32.35	33.68	33.52	32.78
15	32.20	31.48	33.40	32.81	33.45	33.31	34.54	32.07	32.24	33.53	32.86	32.35
20	32.14	31.61	33.27	32.84	33.22	32.95	33.57	31.81	32.25	33.44	32.57	32.02
25	31.96	32.55	32.90	32.89	33.08	32.98	33.15	32.46	33.43	33.45	32.68	31.75
EOM	31.73	33.07	33.60	33.56	33.74	33.49	32.77	33.03	33.17	35.03	33.24	31.53
MEAN	32.11	31.88	33.13	33.14	33.39	33.40	34.17	32.34	32.69	33.65	33.43	32.33
MAX	32.44	33.07	33.60	33.62	33.74	33.88	35.67	33.04	33.43	35.03	35.35	33.15
MIN	31.73	31.34	32.81	32.76	32.99	32.92	32.77	31.72	32.16	33.17	32.56	31.53

WTR YR 1984 MEAN 32.97 MAX 35.67 APR 5 AND OTHERS MIN 31.34 NOV 18

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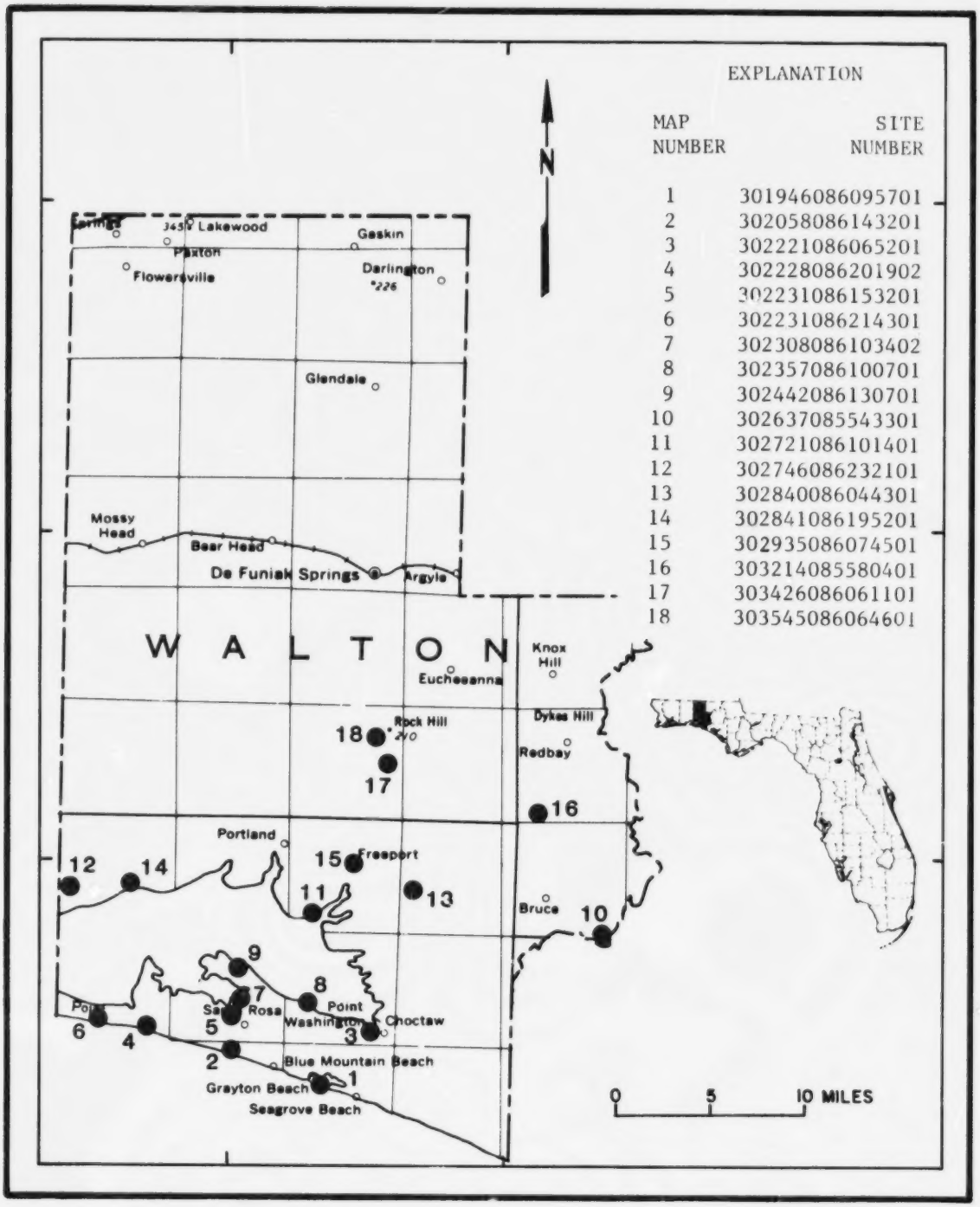

Figure 35. Location of wells in Walton County

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WALTON COUNTY

WELL NUMBER.--301946086095701. Van R. Butler Well at Grayton Beach, FL.

LOCATION.--Lat 30°19'46", long 86°09'57", in NW¼NE¼NE¼ sec.17, T.3 S., R.19 W., Hydrologic Unit 03140102, about 300 ft north of Gulf of Mexico, 2.2 mi south of U.S. Highway 98, at Grayton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 4 in., depth 466 ft, cased to 424 ft.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of tee, 1.2 ft above land-surface datum.

DATUM.--Land-surface datum is 7.46 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--
ELEVATIONS: April 1961 to current year (bimonthly).
WATER QUALITY: 1961-1967 (semiannually); January 1968 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.16 ft NGVD, May 8, 1964; lowest measured, 3.92 ft NGVD, Oct. 13, 1972.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV					
21...	1545	13.54	1100	25.0	240
JAN					
19...	1415	14.16	1030	23.5	240
MAR					
27...	1020	13.81	1080	25.0	240
MAY					
15...	1125	12.56	--	25.5	240
JUL					
11...	1110	11.96	1100	--	240
SEP					
11...	1105	12.36	1110	25.5	240

WELL NUMBER.--302058086143201. Eric Allen Well at Dune Allen Beach, FL.

LOCATION.--Lat 30°20'58", long 86°14'32", in SW¼NE¼SW¼ sec.3, T.3 S., R.20 W., Hydrologic Unit 03140102, south of State Highway 30A near Oyster Lake, 0.8 mi west of State Highway 393 and 1.9 mi southwest of Santa Rosa Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 4 in, depth and casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing at land-surface datum.

DATUM.--Altitude of land-surface datum is 6 ft from topographic map.

PERIOD OF RECORD ELEVATIONS.--June 1968 to August 1970 (bimonthly); July 1974 (annually); March 1975 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

PERIOD OF RECORD WATER QUALITY.--May 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.16 ft NGVD, Mar. 9, 1978; lowest measured, -13.72 ft NGVD, July 16, 1980.

ELEVATION, CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV				
21...	1630	--	260	17
JAN				
19...	1400	0.28	283	11
MAR				
27...	0945	-0.10	280	18
MAY				
16...	1055	-0.16	280	17
JUL				
11...	1040	-3.44	290	17
SEP				
11...	1050	0.64	--	19

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WALTON COUNTY

WELL NUMBER.--302221086065201. C. H. McGee, Jr. Well at Point Washington, FL.

LOCATION.--Lat 30°22'21", long 86°06'52", in SW¼NE¼SE¼ sec.26, T.2 S., R.19 W., Hydrologic Unit 03140102, 1.4 mi northeast of intersection of State Highway 395 and U.S. Highway 98 at Point Washington.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 3 in, depth 365 ft, cased to 65 ft.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of reducer, 1.5 ft above land-surface datum.

DATUM.--Land-surface datum is 2.30 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--
ELEVATIONS: March 1970 to current year (bimonthly).
WATER QUALITY: July 1961 (annually); January 1962 to May 1967 (semiannually); January 1968 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.9 ft NGVD, Nov. 21, 1975 and Jan. 27, 1976; lowest measured, 5.24 ft NGVD, Sept. 12, 1972.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV					
21...	1530	13.90	925	20.0	230
JAN					
19...	1430	--	890	14.0	220
MAR					
24...	1140	15.50	--	--	--
27...	1045	--	900	19.0	220
MAY					
15...	1145	--	840	23.5	220
JUL					
11...	1130	--	860	23.5	220
SEP					
11...	1225	--	970	23.0	220

WELL NUMBER.--302228086201902. Holiday Campground Well near Miramar Beach, FL.

LOCATION.--Lat 30°22'28", long 86°20'19", in NW¼NW¼NE¼ sec. 34, T.2 S., R.21 W., Hydrologic Unit 03140102, 0.2 mi south of U.S. Highway 98, 3.7 mi east of Okaloosa-Walton County line, 3.5 mi east of Miramar Beach.

AQUIFER.--Floridan aquifer of the Teritary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 4 in, depth and casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 4 in casing at land-surface datum.

DATUM.--Altitude of land-surface datum is 24 ft from topographic map.

PERIOD OF RECORD ELEVATIONS.--July 1978 (annually); November 1978 to current year (bimonthly).

PERIOD OF RECORD WATER QUALITY.--1970 (two samples); 1971 (three samples); November 1971 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.71 ft NGVD, Mar. 16, 1979; lowest measured -20.52 ft NGVD, July 11, 1984.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV				
21...	1645	-8.40	328	15
JAN				
19...	1340	-9.70	315	17
MAR				
27...	0930	--	340	21
APR				
05...	1040	-9.64	--	--
MAY				
15...	1005	-13.16	315	25
JUL				
11...	0955	-19.86	350	23
11...	1415	-20.52	--	--
SEP				
11...	1010	-18.98	350	18

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WALTON COUNTY

WELL NUMBER.--302231086153201. J. R. Holley Well near Santa Rosa Beach, FL.

LOCATION.--Lat 30°22'32", long 86°15'32", in SW¼SW¼SE¼ sec.28, T.2 S., R.20 W., Hydrologic Unit 03140102, behind residence 150 ft north of U.S. 98, 1.75 mi west of Santa Rosa Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, unused artesian well, diameter 3 in., depth 545 ft cased to 265 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 2 in. nipple, 0.85 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 12 ft from topographic map.

PERIOD OF RECORD.--
ELEVATIONS: May 1971 (annually); July 1978 to current year (bimonthly).
WATER QUALITY: July 1978 to current year.

REMARKS.--Water quality data collected at adjacent well number 302231086153203.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.60 ft NGVD, Mar. 31, 1983; lowest measured, 8.00 ft NGVD, May 21, 1970.

ELEVATION, CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV				
21...	1615	9.10	--	600
JAN				
19...	1555	9.86	2180	600
MAR				
28...	1025	10.53	2050	610
MAY				
17...	1450	9.09	2030	590
JUL				
11...	1345	8.60	2210	610
SEP				
11...	1030	9.59	2200	590

WELL NUMBER.--302231086214301. M. T. Fontarn Well near Miramar Beach, FL.

LOCATION.--Lat 30°22'31", long 86°21'43", in NE¼NW¼NW¼ sec.33, T.2 S., R.21 W., Hydrologic Unit 03140102, at residence behind Sea and Indian Museum, 2.1 mi east of Okaloosa-Walton county line and 7.2 mi west of Santa Rosa Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in, depth 420 ft, cased to 350 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing at land-surface datum.

DATUM.--Altitude of land-surface datum is 23 ft, from topographic map.

PERIOD OF RECORD ELEVATIONS.--June 1968 to September 1970 (bimonthly); July 1974 (annually); March 1975 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

PERIOD OF RECORD WATER QUALITY.--July 1968 to August 1969 (bimonthly); 1970 (two samples); March 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.92 ft NGVD, June 5, 1968; lowest measured, -27.15 ft NGVD, Sept. 11, 1984.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV					
21...	1655	-17.95	259	--	11
JAN					
19...	1330	-18.20	247	--	11
MAR					
27...	0830	-17.40	255	17.5	11
MAY					
15...	0935	-19.44	255	--	11
JUL					
11...	0915	-22.58	290	--	11
SEP					
11...	0945	-27.15	315	--	11

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WALTON COUNTY

WELL NUMBER.--302308086103402. Walter Dannelly Well near Santa Rosa Beach, FL.

LOCATION.--Lat 30°23'08", long 86°10'34", in SE¼NE¼NW¼ sec.29, T.2 S., R. 19 W., Walton Conty, Hydrologic Unit 03140102, in front of residence 0.4 mi east of U.S. Highway 331, and 3.0 mi northeast of Santa Rosa Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in, depth and lenght of casing unknown.

PERIOD OF RECORD.--January 1978 to current year.

CONDUCTANCE AND CHLORIDE DATA, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV				MAY			
21...	1315	2500	650	15...	1210	2350	650
JAN				JUL			
19...	1200	2250	650	11...	1150	2350	660
MAR				SEP			
27...	1110	2250	630	11...	1340	2040	660

WELL NUMBER.--302357086100701. Florida Department of Transportation Well near Santa Rosa Beach, FL.

LOCATION.--Lat 30°23'57", long 86°10'07", in SW¼NW¼NE¼ sec.20, T.2 S., R.19 W., Hydrologic Unit 03140102, near south end of U.S. Highway 331 bridge over Choctawhatchee Bay, 2.4 mi north of U.S. Highway 98, and 3.8 mi northeast of Santa Rosa Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 3 in., depth 337 ft, casing length unknown.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of coupling 1.10 ft above land-surface datum.

DATUM--Land-surface datum is 5.00 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--
ELEVATIONS: April 1961 to July 1962, May 1968 to May 1969, April 1970 to current year (bimonthly).
WATER QUALITY: July 1961 (annually); January 1962 to May 1967 (semiannually); January 1968 to July 1969 (bimonthly); June 1970 (annually); 1971 (three samples); November 1971 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.80 ft NGVD, Feb. 28, 1962; lowest measured, 0.86 ft NGVD, Oct. 11, 1972.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV						MAY					
21...	1510	11.08	1820	22.5	590	15...	1220	11.00	2000	23.0	570
JAN						JUL					
19...	1515	11.30	2000	17.0	580	11...	1210	9.80	2100	23.0	580
MAR						SEP					
27...	1126	12.20	1950	21.0	580	11...	1355	9.70	2050	23.5	570

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WALTON COUNTY

WELL NUMBER.--302442086130701. S. L. Matthews Well near Santa Rosa Beach, FL.

LOCATION.--Lat 30°24'42", long 86°13'07", in NE¼SW¼SW¼ sec.14, T.2 S., R.20 W., Hydrologic Unit 03140102, in front of residence 0.9 mi northeast of SR 393 about 3 mi north of Santa Rosa Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic artesian well, diameter 8 in, depth 330 ft, cased to 165 ft.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of 3 in casing, 1.0 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 5 ft from topographic map.

PERIOD OF RECORD ELEVATIONS.--September 1969 (annually); July 1978 to current year (bimonthly).

PERIOD OF RECORD WATER QUALITY.--September 1969 (annually); July 1978 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.53 ft NGVD, Mar. 21, 1979; lowest measured, 4.67 ft NGVD, Sept. 11, 1984.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV					
21...	1600	6.47	--	--	870
JAN					
19...	1200	6.57	3000	--	870
MAR					
28...	0940	8.04	3000	20.0	860
MAY					
17...	1430	6.31	3150	21.0	870
JUL					
1?...	1325	4.97	--	--	--
SEP					
11...	1255	4.67	--	--	--

WELL NUMBER.--302637085543301. William Wilson Well near Bruce, FL.

LOCATION.--Lat 30°26'37", long 85°54'33", in NE¼SE¼SE¼ sec.35, T.1 N., R.17 W., Hydrologic Unit 03140203, at Cowford Fish Camp, 0.7 mi south of State Highway 20, and 3.8 mi southeast of Bruce.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 3 in., depth 196 ft, cased to 60 ft.

INSTRUMENTATION.--Pressure gage. Measuring point: Top of reducer, 0.80 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 16 ft, from topographic map.

PERIOD OF RECORD.--
ELEVATIONS: June 1968 to current year (bimonthly).
WATER QUALITY: June 1968 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.20 ft NGVD, Nov. 21, 1975; lowest measured, 16.75 ft NGVD, Oct. 12, 1972.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV					
21...	1330	22.32	112	22.0	2.9
JAN					
18...	0955	23.40	109	21.5	3.5
MAR					
26...	1230	24.57	112	21.5	3.4
MAY					
14...	1445	22.85	117	21.0	3.0
JUL					
10...	1200	22.60	130	21.5	3.1
AUG					
21...	0805	23.50	120	21.5	2.9

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WALTON COUNTY

WELL NUMBER.--302721086101401. Selma Madara Well near Freeport, FL.

LOCATION.--Lat 30°27'21", long 86°10'14", in SW¼NE¼NW¼ sec.32, T.1 S., R.19 W., Hydrologic Unit 03140102, near the west bank at mouth of Bear Creek, and 3.5 mi southwest of Freeport.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, industrial, artesian well, diameter 12 in depth 250 ft, cased to 100 ft.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of tee, 2.0 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 4 ft, from topographic map.

PERIOD OF RECORD ELEVATIONS.--July 1968 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

PERIOD OF RECORD WATER QUALITY.--August 1968 to May 1969 (bimonthly); 1970 (two samples); 1971 (three samples); 1972 (semiannual); January 1973 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.0 ft NGVD, Mar. 22, 1976; lowest measured, -7.73 ft NGVD, Oct. 11, 1972.

EXTREMES OUTSIDE PERIOD OF RECORD.--A water level of 27 ft NGVD, was reported by Frank Westendick in 1931, month unknown.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV						MAY					
22...	1235	14.10	--	21.5	130	15...	1350	12.80	700	--	140
JAN						JUL					
18...	1300	14.80	638	18.5	130	10...	1520	12.60	700	--	130
MAR						SEP					
27...	1320	15.50	660	21.0	130	11...	1525	12.00	650	25.0	120

WELL NUMBER.--302746086232101. Ray Wright Well at Villa Tasso, FL.

LOCATION.--Lat 30°27'46", long 86°23'21", in SE¼SW¼NW¼ sec. 30, T.1 S., R.21 W., Hydrologic Unit 03140102, 0.5 mi east of Okaloosa-Walton County line at Villa Tasso Kennels at Villa Tasso.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 440 ft, cased to 220 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of sanitary seal 1.0 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 19 ft from topographic map.

PERIOD OF RECORD.--
ELEVATIONS: March 1978 to July 1979 (semiannually); November 1980 to current year (bimonthly).
WATER QUALITY: July 1979 (annually); 1981 (semiannually); November 1981 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.75 ft NGVD, Mar. 29, 1978; lowest measured, -13.53 ft NGVD, Sept. 11, 1984.

ELEVATION, CONDUCTANCE AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV					MAY				
22...	1405	-6.97	248	2.8	17...	1130	-9.00	250	6.0
JAN					JUL				
18...	1355	-6.10	231	2.6	10...	1615	-13.44	240	2.5
MAR					SEP				
27...	1450	-4.69	235	5.6	11...	1625	-13.53	250	3.4

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WALTON COUNTY

WELL NUMBER.--302840086044301. Thomas Miller Well near Freeport, FL.

LOCATION.--Lat 30°28'40", long 86°04'43", in NE¼NE¼NW¼ sec.32, T.1 N., R.18 W., Hydrologic Unit 03140102, at private residence, 2.6 mi east of intersection of State Highway 20 and U.S. Highway 331, 4.0 mi east of Freeport.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL DESCRIPTION.--Drilled, domestic, artesian well, diameter 4 in, depth 200 ft, length of casing unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of sanitary seal, 1.0 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 40 ft, from topographic map.

PERIOD OF RECORD ELEVATIONS.--1978 (two measurements); 1979 (three measurements); November 1980 to September 1981 (bimonthly).

PERIOD OF RECORD WATER QUALITY.--1978, 1979 (annually); May 1981 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.71 ft NGVD, Mar. 15, 1978; lowest measured, 6.62 ft NGVD, July 11, 1979.

ELEVATION, CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV				
21...	1145	16.61	--	--
21...	1425	--	222	3.4
JAN				
18...	1050	17.71	212	3.3
MAR				
27...	1235	17.84	215	6.0
MAY				
14...	1530	13.16	225	3.3
JUL				
10...	1245	15.24	205	3.5
SEP				
11...	1415	11.46	230	2.9

WELL NUMBER.--302841086195201. R. E. Lalonde Well at Choctaw Beach, FL.

LOCATION.--Lat 30°28'41", long 86°19'52", in SW¼NE¼SE¼ sec.22, T.1 S., R.21 W., Hydrologic Unit 03140102, 75 ft north of State Highway 20, 200 ft north of wayside park and 1.2 mi east of Choctaw Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth 316 ft, cased to 132 ft.

INSTRUMENTATION.--Pressure gage. Measuring point: Top of casing, 2.0 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 2 ft, from topographic map.

PERIOD OF RECORD.--
ELEVATIONS: December 1969, July 1974 (annually); March 1975 to current year (bimonthly).
QUALITY WATER: May 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.4 ft NGVD, Mar. 4, 1976; lowest measured, 0.67 ft NGVD, Sept. 10, 1984.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV					
22...	1205	4.03	--	--	--
JAN					
18...	1335	4.70	218	17.0	3.2
MAR					
27...	1415	5.56	220	20.0	2.3
MAY					
17...	1200	3.67	--	--	--
SEP					
10...	1605	0.67	--	--	--

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WELL NUMBER.--302935086074501. Local Number 17. City of Freeport Well at Freeport, FL.

LOCATION.--Lat 30°29'13", long 86°08'12", in SW¼SE¼SW¼ sec.15, T.1 S., R.19 W., Hydrologic Unit 03140102, 81 ft east-northeast of Fourmile Creek and 381 ft north-northwest of confluence of Fourmile and Lafayette Creek, and 0.4 mi southeast of City Hall at Freeport.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 in, depth 187 ft, casing length unknown.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of tee, 3.50 ft above land-surface datum.

DATUM.--Land-surface datum is 2.70 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD ELEVATIONS.--September 1947 to October 1963 (bimonthly); June 1969 (annually); September 1974 to current year (bimonthly).

PERIOD OF RECORD WATER QUALITY.--November 1974 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.7 ft NGVD, Sept. 3, 1947; lowest measured, -1.60 ft NGVD, June 18, 1969.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV					
22...	1250	17.40	160	20.5	3.8
JAN					
18...	1245	18.40	170	21.5	2.4
MAR					
27...	1300	19.30	165	24.0	2.3
MAY					
15...	1330	14.30	170	--	3.2
JUL					
10...	1455	16.20	160	--	3.0
SEP					
11...	1435	15.00	185	23.0	1.9

WELL NUMBER.--303214085580401. Local Number FAF No. 72. First American Farms Well near Bruce, FL.

LOCATION.--Lat 30°32'14", long 85°58'04", in SW¼SE¼NW¼ sec.32, T.2 N., R.17 W., Hydrologic Unit 03140203, about 4 mi southwest of Redbay and about 4.5 mi north of Bruce.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, irrigation, artesian well, diameter 10 in., depth 506 ft, cased to 218 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 0.50 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 123 ft, from topographic map.

PERIOD OF RECORD.--September 1968 to November 1970; November 1970 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORDS.--Highest water level measured, 31.01 ft NGVD, Nov. 21, 1975; lowest, -51.20 ft NGVD, July 13, 1970.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV		
21...	1400	26.70
JAN		
18...	1025	28.80
MAR		
26...	1310	30.06
MAY		
14...	1400	20.88
JUL		
10...	1210	25.53
SEP		
10...	0945	22.10

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WALTON COUNTY

WELL NUMBER.--303426086061101. Local Number FAF No. 2. First American Farms Well near Freeport, FL.

LOCATION.--Lat 30°34'26", long 86°,06'11", in NE¼NW¼NW¼ sec. 24, T.1 N., R.19 W., Hydrologic Unit 03140102, 0.2 mi east of U.S. Highway 331, 1 mi north of clay road, and 5.5 mi north of Freeport.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, irrigation, artesian well, diameter 10 in, depth 440 ft, cased to 172 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing at land-surface datum. Prior to October 7, 1970 water-level recorder at same site and datum.

DATUM.--Land-surface datum is 153.46 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1968 to October 1970; November 1970 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.33 ft NGVD, Nov. 20, 1975; lowest measured, -45.25 ft NGVD, Oct. 11, 1972.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
22...	1315	37.96	15...	1500	31.56
JAN			JUL		
18...	1125	39.36	10...	1350	36.09
MAR			SEP		
26...	1445	40.56	10...	1110	32.27

WELL NUMBER.--303545086064601. U.S. Air Force Rock Hill Tower Well at Rock Hill, FL.

LOCATION.--Lat 30°35'45", long 86°06'46", in NE¼NW¼SE¼ sec.11, T. 1 N., R.19 W., Hydrologic Unit 03140102, Rock Hill Tower at Rock Hill, 0.1 mi north of intersection of U.S. Highway 331 and State Highway 202, and 7 mi north of Freeport.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 440 ft, cased 248 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 0.60 ft above land-surface datum.

DATUM.--Land-surface datum is 210.50 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1968 to current year (bimonthly).

REMARKS.--Water levels affected by nearby irrigation pumpage.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 77.60 ft NGVD, Mar. 30, 1983; lowest measured, 8.22 ft NGVD, June 26, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
22...	1320	57.10	15...	1520	41.67
JAN			JUL		
18...	1110	48.41	10...	1410	44.70
MAR			SEP		
26...	1403	49.62	10...	1040	42.48

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Figure 36. Location of wells in Washington County

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WASHINGTON COUNTY

WELL NUMBER--303025085350501. Local Number 422A. U.S. Geological Survey Observation Well near Wausau, FL.

LOCATION.--Lat 30°30'25", long 85°35'05", in SE¼NW¼NW¼ sec.7, T.1 N., R.13 W., Hydrologic Unit 03140101, 0.6 mi east of road to Deadening Cemetary, 4.2 mi east of State Highway 77, and 8.6 mi south of Wausau.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 150 ft, cased to 110 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 2.90 ft above land-surface datum.

DATUM.--Land-surface datum is 66.11 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.75 ft NGVD, Oct. 1, 2, 1979; lowest, 48.19 ft NGVD, Feb. 13, 14, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	59.28	58.64	58.87	59.23	59.74	59.70	60.59	60.54	60.08	60.65	61.90	62.29
10	59.12	58.59	59.01	59.18	59.56	60.07	60.86	60.40	60.05	60.49	61.89	62.17
15	59.26	58.44	59.50	58.98	59.64	60.01	60.81	60.24	60.11	60.76	61.88	62.23
20	59.06	58.47	59.42	59.21	59.52	60.19	60.73	60.08	60.14	61.13	62.06	62.05
25	58.92	58.73	59.19	59.33	59.47	60.16	60.67	60.14	60.50	61.24	62.28	---
EOM	58.75	58.85	59.31	59.51	59.46	60.13	60.60	60.17	60.62	61.71	62.30	---
MEAN	59.10	58.59	59.23	59.23	59.58	60.00	60.67	60.29	60.20	60.95	62.03	62.20
MAX	59.41	58.89	59.54	59.58	59.75	60.27	60.86	60.63	60.62	61.71	62.34	62.29
MIN	58.75	58.33	58.76	58.98	59.46	59.40	60.05	60.05	60.03	60.49	61.73	62.05

WTR YR 1984 MEAN 60.12 MAX 62.34 AUG 26 AND OTHERS MIN 58.33 NOV 19

WELL NUMBER.--303025085350502. Local number 030-535-422B. U.S. Geological Survey Observation Well near Wausau, FL.

LOCATION.--Lat 30°30'25", long 85°35'05", in SE¼NW¼NW¼ sec.7, T.1 N., R.13 W., Hydrologic Unit 03140101, 0.6 mi east of road to Deadening Cemetery, 4.2 mi east of State Highway 77, and 8.6 mi south of Wausau.

AQUIFER.--Nonartesian sand aquifer of the Tertiary System, Geologic Unit 120 NRSD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 2 in, depth 26 ft, cased to 23 ft, screened from 23 to 26 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 2.80 ft above land-surface datum.

DATUM.--Land-surface datum is 67.48 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1962 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 66.21 ft NGVD, Feb. 20, 1964; lowest measured, 58.55 ft NGVD, Nov. 7, 1972.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV 18...	0945	61.94	MAY 09...	0840	63.06
JAN 11...	1540	64.55	AUG 21...	1005	64.77
FEB 29...	1310	64.88			

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WASHINGTON COUNTY

WELL NUMBER.--303830085440801. Wayne Weber Well near Vernon, Fl.

LOCATION.--Lat 30°38'30", long 85°44'08", in SW¼NW¼NW¼ sec.27, T.3 N., R.15 W., Hydrologic Unit 03140203, about 60 ft east of dirt farm road, 0.2 mi south of county road 170 and 1.6 mi northwest of Vernon.

AQUIFER.--Florida Aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian, stock well, diameter 4 in., depth and casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of sanitary seal, 0.50 ft above land-surface datum.

DATUM.--Altitude of land-surface datum is 50 ft from topographic map.

PERIOD OF RECORD.--January 1983 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 33.84 ft NGVD, Mar. 29, 1983; lowest measured 29.03 ft, Sept. 6, 1983.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
28...	1250	29.28	09...	1030	31.78
JAN			JUN		
12...	1045	31.13	26...	1030	29.28
MAR			AUG		
01...	1625	32.82	20...	1735	30.86

WELL NUMBER.--304632085485101. Local number 4. Town of Caryville Well at Caryville, FL.

LOCATION.--Lat 30°46'32", long 85°48'51", in NW¼NE¼NW¼ sec.11, T.4 N., R.16 W., Hydrologic Unit 03140203, at lumber mill, 0.1 mi north of U.S. Highway 90 at Caryville.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 4 in., depth 785 ft, casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 1.00 ft above land-surface datum.

DATUM.--Land-surface datum is 62.97 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1946 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 56.17 ft NGVD, Mar. 9, 1966; lowest measured, 44.99 ft NGVD, Nov. 23, 1952.

EXTREMES OUTSIDE PERIOD OF RECORD.--A water-level of 62.97 ft NGVD, was reported by driller, Dec. 12, 1935.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1983 TO SEPTEMBER 1984

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
28...	1320	50.11	09...	1055	51.75
JAN			JUN		
12...	1115	51.58	21...	1400	50.78
MAR			AUG		
01...	1315	53.45	20...	1215	51.68

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MISCELLANEOUS WATER LEVEL MEASUREMENTS

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MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 1983 TO SEPTEMBER 1984

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEV-ATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEO-LOGIC UNIT
	ALACHUA					
293542082253801	U.S.G.S./HOWELL WELL AT KANAPAHA	84-05-22	51.87	--	77.00	120FLRD
294839082230701	CELLON WELL NR LA CROSSE	84-05-24	49.21	--	164.00	120FLRD
		84-09-24	48.85	--	164.00	
294923082174501	MONTEOCHA	84-05-24	64.38	--	100.00	120FLRD
		84-09-24	62.45	--	100.00	
	BAKER					
301423082261101	B-15	84-04-23	66.15	--	160.00	120FLRD
		84-09-18	56.82	--	160.00	
302251082194901	B-25 ONF #6 FLORIDAN WELL NEAR TAYLOR, FL.	83-10-27	53.25	--	128.00	120FLRD
		83-11-23	53.19	--	128.00	
		83-12-28	53.82	--	128.00	
		84-01-27	55.10	--	128.00	
		84-02-28	55.88	--	128.00	
		84-03-19	57.63	--	128.00	
		84-04-26	59.73	--	128.00	
		84-05-15	57.67	--	128.00	
		84-06-28	54.71	--	128.00	
		84-07-30	54.41	--	128.00	
		84-08-29	53.12	--	128.00	
		84-09-10	53.73	--	128.00	
	BAY					
300347085345501	LOCAL NO. 003534113	83-11-16	4.05	23.80	28.00	120FLRD
		84-05-10	3.93	23.92	28.00	
301006085413501	WELL BAY 7 AT PANAMA CITY, FLORIDA	83-11-26	-4.77	31.10	26.30	120FLRD
		84-05-10	-4.15	30.48	26.30	
301550085355801	LOCAL NO.015-535-113	83-11-17	8.89	-1.11	7.80	120FLRD
		84-05-10	8.96	-1.18	7.80	
302327085260701	COUCH CONSTRUCTION CO WELL NR YOUNGSTOWN,FL	83-11-21	97.30	-2.30	95.00	120FLRD
		84-05-17	97.88	-2.88	95.00	
	BRADFORD					
295055082130801	GRAHAM USGS WELL NR.WALDO	84-04-26	68.61	--	140.00	120FLRD
		84-08-27	65.73	--	140.00	
295257082045701	SOUTH OF STARKE	84-05-04	88.50	--	174.00	120FLRD
		84-08-27	86.38	--	174.00	
300020082103001	LOCAL NO.000-210-2	84-05-04	63.71	--	138.00	120FLRD
		84-08-27	62.11	--	138.00	
	CALHOUN					
301437085114901	LOCAL NO.014-511-1	84-05-11	40.65	-8.95	31.70	120FLRD
303024085024701	STAFFORD CR WELL N OF BLOUNTSTOWN,FL	83-11-14	59.86	30.14	90.00	120FLRD
		84-05-08	61.30	28.70	90.00	
	ESCAMBIA					
302220087205001	USGS TH11 DOG TRACK RD.	83-10-17	--	12.61	22.00	120NFSG
		83-11-14	--	12.79	22.00	
		83-12-05	--	12.36	22.00	
		84-01-09	--	12.60	22.00	
		84-02-13	--	12.53	22.00	
		84-03-19	--	12.25	22.00	
		84-04-09	--	12.15	22.00	
		84-05-14	--	13.58	22.00	
		84-06-18	--	15.10	22.00	
		84-07-09	--	15.50	22.00	
		84-08-20	--	13.40	22.00	
		84-09-10	--	14.16	22.00	

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STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEV-ATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEO-LOGIC UNIT
	ESCAMBIA					
302232087240501	USGS TH108,SE BRONSON FLD	83-10-17	--	17.57	25.00	120NFSG
		83-11-14	--	18.52	25.00	
		83-12-05	--	17.78	25.00	
		84-01-09	--	17.96	25.00	
		84-02-13	--	17.75	25.00	
		84-03-19	--	17.48	25.00	
		84-04-09	--	17.29	25.00	
		84-05-14	--	18.14	25.00	
		84-06-18	--	18.97	25.00	
		84-07-09	--	19.04	25.00	
		84-08-20	--	17.23	25.00	
		84-09-10	--	17.87	25.00	
302302087252501	USGS TH107,BRONSON FLD.	83-10-17	5.01	6.12	11.10	120NFSG
		83-11-14	4.50	6.63	11.10	
		83-12-05	4.44	6.69	11.10	
		84-01-09	5.19	5.94	11.10	
		84-02-13	4.43	6.70	11.10	
		84-03-19	5.34	5.79	11.10	
		84-04-09	5.04	6.09	11.10	
		84-05-14	4.53	6.60	11.10	
		84-06-18	3.44	7.69	11.10	
		84-07-09	3.91	7.22	11.10	
		84-08-20	6.07	5.06	11.10	
		84-09-10	4.75	6.38	11.10	
302302087252502	USGS TH107A,BRONSON FLD.	83-10-17	4.42	6.71	11.10	120NFSG
		83-11-14	3.61	7.52	11.10	
		83-12-05	3.69	7.44	11.10	
		84-01-09	3.80	7.33	11.10	
		84-02-13	3.71	7.42	11.10	
		84-03-19	5.33	5.80	11.10	
		84-04-09	5.04	6.09	11.10	
		84-05-14	3.99	7.14	11.10	
		84-06-18	3.05	8.08	11.10	
		84-07-09	2.86	8.27	11.10	
		84-08-20	6.06	5.07	11.10	
		84-09-10	4.78	6.35	11.10	
302320087214601	USGS TH109,TANTON RD	83-10-17	--	14.91	26.00	120NFSG
		83-11-14	--	15.26	26.00	
		83-12-05	--	14.89	26.00	
		84-01-09	--	15.41	26.00	
		84-02-13	--	15.25	26.00	
		84-03-19	--	14.82	26.00	
		84-04-09	--	14.82	26.00	
		84-05-14	--	15.94	26.00	
		84-06-18	--	16.98	26.00	
		84-07-09	--	16.96	26.00	
		84-08-20	--	15.30	26.00	
		84-09-10	--	16.17	26.00	
302354087210501	USGS TH9-FRGSN AIR SERV.	83-10-17	--	15.37	26.00	120NFSG
		83-11-14	--	15.62	26.00	
		83-12-05	--	15.16	26.00	
		84-01-09	--	15.97	26.00	
		84-02-13	--	15.65	26.00	
		84-03-19	--	15.17	26.00	
		84-04-09	--	15.18	26.00	
		84-05-14	--	16.84	26.00	
		84-06-18	--	18.01	26.00	
		84-07-09	--	17.79	26.00	
		84-08-20	--	16.08	26.00	
		84-09-10	--	17.29	26.00	
302354087210502	USGS TH9A-FRGSN AIR.SERV.	83-10-17	--	1.84	26.00	120NFSG
		83-11-14	--	2.79	26.00	
		83-12-05	--	1.37	26.00	
		84-01-09	--	1.43	26.00	
		84-02-13	--	1.04	26.00	

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MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 1983 TO SEPTEMBER 1984

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEV-ATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEO-LOGIC UNIT
		ESCAMBIA				
302354087210502	USGS TH9A-FRGSN AIR.SERV.	84-03-19	--	1.42	26.00	120NFSG
		84-04-09	--	0.91	26.00	
		84-05-14	--	2.79	26.00	
		84-06-18	--	3.99	26.00	
		84-07-09	--	3.33	26.00	
		84-08-20	--	1.17	26.00	
		84-09-10	--	2.15	26.00	
302355087200301	USGS TH31,1 MI.W.FAIRFLD	83-10-17	--	15.67	28.00	120NFSG
		83-11-14	--	15.89	28.00	
		83-12-05	--	15.38	28.00	
		84-01-09	--	16.51	28.00	
		84-02-13	--	15.88	28.00	
		84-03-19	--	15.39	28.00	
		84-04-09	--	15.37	28.00	
		84-05-14	--	18.32	28.00	
		84-06-18	--	19.76	28.00	
		84-07-09	--	19.17	28.00	
		84-08-20	--	17.52	28.00	
		84-09-10	--	19.52	28.00	
302432087182601	USGS TH3-72ND AVE.S.JKSN	83-10-17	--	11.17	31.00	120NFSG
		83-11-14	--	11.37	31.00	
		83-12-05	--	11.17	31.00	
		84-01-09	--	12.03	31.00	
		84-02-13	--	11.33	31.00	
		84-03-19	--	10.54	31.00	
		84-04-09	--	10.28	31.00	
		84-05-14	--	13.86	31.00	
		84-06-18	--	14.98	31.00	
		84-07-09	--	15.23	31.00	
		84-08-20	--	12.94	31.00	
		84-09-10	--	14.85	31.00	
302435087141601	USGS TH104 ROMANA W.K ST	83-10-17	8.21	14.47	22.70	120NFSG
		83-11-14	7.88	14.80	22.70	
		83-12-05	8.11	14.57	22.70	
		83-12-15	9.00	13.68	22.70	
		84-01-09	7.66	15.02	22.70	
		84-02-07	7.11	15.57	22.70	
		84-02-13	7.72	14.96	22.70	
		84-03-08	7.68	15.00	22.70	
		84-03-19	7.03	15.65	22.70	
		84-04-09	8.29	14.39	22.70	120NFSG
		84-05-14	6.39	16.29	22.70	
		84-05-31	6.72	15.96	22.70	
		84-06-18	7.03	15.65	22.70	
		84-07-09	6.35	16.33	22.70	
		84-07-18	6.12	16.56	22.70	
		84-08-20	8.47	14.21	22.70	
		84-09-10	7.41	15.27	22.70	
302459087154401	USGS TH103 KEYES COURT	83-10-17	10.01	43.79	53.80	120NFSG
		83-11-14	9.68	44.12	53.80	
		83-12-05	10.00	43.80	53.80	
		84-01-09	11.13	42.67	53.80	
		84-02-13	9.89	43.91	53.80	
		84-03-19	9.58	44.22	53.80	
		84-04-09	10.28	43.52	53.80	
		84-05-14	8.79	45.01	53.80	
		84-06-18	9.86	43.94	53.80	
		84-07-09	8.33	45.47	53.80	
		84-08-20	10.19	43.61	53.80	
		84-09-10	11.65	42.15	53.80	

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	ESCAMBIA					
302541087114501	USGS TH1-17TH&GONZALEZ ST	83-10-03	--	56.03	62.00	120NFSG
		83-11-14	--	56.20	62.00	
		83-12-05	--	56.27	62.00	
		84-01-09	--	56.56	62.00	
		84-02-13	--	56.48	62.00	
		84-03-19	--	56.28	62.00	
		84-04-09	--	55.95	62.00	
		84-05-14	--	56.77	62.00	
		84-06-18	--	56.84	62.00	
		84-07-09	--	57.06	62.00	
		84-08-20	--	56.39	62.00	
		84-09-10	--	56.65	62.00	
302541087114502	USGS TH1A-17TH&GONZALEZ	83-10-03	--	55.01	62.00	120NFSG
		83-11-14	--	55.14	62.00	
		83-12-05	--	55.05	62.00	
		84-01-09	--	56.35	62.00	
		84-02-13	--	55.49	62.00	
		84-03-19	--	55.25	62.00	
		84-04-09	--	54.80	62.00	
		84-05-14	--	54.71	62.00	
		84-06-18	--	55.20	62.00	
		84-07-09	--	55.47	62.00	
		84-08-20	--	54.90	62.00	
		84-09-10	--	54.92	62.00	
302958087230001	USGS TH8-HURST HAMMOCK RD	83-10-17	--	78.87	103.00	120NFSG
		83-11-14	--	78.75	103.00	
		83-12-05	--	78.84	103.00	
		84-01-09	--	78.83	103.00	
		84-02-13	--	78.32	103.00	
		84-03-19	--	78.54	103.00	
		84-04-09	--	78.42	103.00	
		84-05-14	--	79.10	103.00	
		84-06-18	--	79.71	103.00	
		84-07-09	--	79.79	103.00	
		84-08-20	--	78.91	103.00	
		84-09-10	--	79.17	103.00	
303006087205201	USGS TH7-US 90 S OF JAMES	83-10-17	--	59.12	85.00	120NFSG
		83-11-14	--	59.34	85.00	
		83-12-05	--	59.38	85.00	
		84-01-09	--	59.35	85.00	
		84-02-13	--	58.87	85.00	
		84-03-19	--	58.80	85.00	
		84-04-09	--	58.53	85.00	
		84-05-14	--	59.26	85.00	
		84-06-18	--	59.92	85.00	
		84-07-09	--	60.06	85.00	
		84-08-20	--	59.48	85.00	
		84-09-10	--	59.69	85.00	
303018087192201	USGS TH5 8MI CRK&DUNAWAY	83-10-17	--	39.72	74.00	120NFSG
		83-11-14	--	40.02	74.00	
		83-12-05	--	40.01	74.00	
		84-01-09	--	39.84	74.00	
		84-02-13	--	39.33	74.00	
		84-03-19	--	48.97	74.00	
		84-04-09	--	38.85	74.00	
		84-05-14	--	52.90	74.00	
		84-06-18	--	42.12	74.00	
		84-07-09	--	52.20	74.00	
		84-08-20	--	39.70	74.00	
		84-09-10	--	40.42	74.00	
303018087192202	USGS TH5A 8MI CRK&DUNAWAY	83-10-17	--	35.65	74.00	120NFSG
		83-11-14	--	36.13	74.00	
		83-12-05	--	36.59	74.00	
		84-01-09	--	36.47	74.00	
		84-02-13	--	35.82	74.00	

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MISCELLANEOUS WATER LEVEL MEASUREMENTS
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		ESCAMBIA				
303018087192201	USGS TH5A 8MI CRK&DUNAWAY	84-03-19	--	48.97	74.00	120NFSG
		84-04-09	--	38.85	74.00	
		84-05-14	--	52.90	74.00	
		84-06-18	--	42.12	74.00	
		84-07-09	--	52.20	74.00	
		84-08-20	--	39.7	74.00	
		84-09-10	--	40.4[illegible]	74.00	
303018087192202	USGS TH5A 8MI CRK&DUNAWAY	83-10-17	--	35.65	74.00	120NFSG
		83-11-14	--	36.13	74.00	
		83-12-05	--	36.59	74.00	
		84-01-09	--	36.47	74.00	
		84-02-13	--	35.82	74.00	
		84-03-19	--	35.00	74.00	
		84-04-09	--	35.00	74.00	
		84-05-14	--	35.70	74.00	
		84-06-18	--	36.53	74.00	
		84-07-09	--	37.14	74.00	
		84-08-20	--	37.01	74.00	
		84-09-10	--	37.08	74.00	
303208087132701	USGS TH6 DAVID&BARRINGER	83-10-03	21.66	34.53	56.20	120NFSG
		83-11-14	21.69	34.50	56.20	
		83-12-05	21.80	34.39	56.20	
		84-01-09	21.90	34.29	56.20	
		84-02-13	22.36	33.83	56.20	
		84-03-12	22.58	33.61	56.20	
		84-04-09	22.90	33.29	56.20	
		84-05-14	22.36	33.83	56.20	
		84-06-11	21.99	34.20	56.20	
		84-07-02	22.07	34.12	56.20	
		84-09-17	22.50	33.69	56.20	
303216087194101	USGS TH29-CALICO DRIVE	83-10-17	--	54.15	96.00	120NFSG
		83-11-14	--	54.22	96.00	
		83-12-05	--	54.36	96.00	
		84-01-09	--	54.15	96.00	
		84-02-13	--	53.89	96.00	
		84-03-19	--	53.46	96.00	
		84-04-09	--	53.29	96.00	
		84-05-14	--	53.94	96.00	
		84-06-18	--	54.30	96.00	
		84-07-09	--	54.53	96.00	
		84-08-20	--	54.13	96.00	
		84-09-10	--	54.17	96.00	
303249087140801	USGS TH21 GREENBRIAR RD	83-10-03	24.42	18.05	42.50	120NFSG
		83-11-14	23.82	18.65	42.50	
		83-12-05	23.92	18.55	42.50	
		84-01-09	23.63	18.84	42.50	
		84-02-13	23.97	18.50	42.50	
		84-03-12	24.54	17.93	42.50	120NFSG
		84-04-09	24.61	17.86	42.50	
		84-05-14	24.05	18.42	42.50	
		84-06-11	23.23	19.24	42.50	
		84-07-02	22.72	19.75	42.50	
		84-09-17	22.85	19.62	42.50	
303251087150201	USGS TH20,10-MI RD.	83-10-03	34.17	65.94	100.00	120NFSG
		83-11-14	34.47	65.64	100.00	
		83-12-05	34.27	65.84	100.00	
		84-01-09	34.26	65.85	100.00	
		84-02-13	34.53	65.58	100.00	
		84-03-12	34.42	65.69	100.00	
		84-04-09	34.82	65.29	100.00	
		84-05-14	34.71	65.40	100.00	
		84-06-11	34.66	65.45	100.00	
		84-07-02	34.38	65.73	100.00	
		84-09-17	33.95	66.16	100.00	

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	ESCAMBIA					
303346087185401	USGS TH18-W.ROBERTS ROAD	83-10-03	--	74.95	124.00	120NFSG
		83-11-14	--	74.66	124.00	
		83-12-05	--	74.81	124.00	
		84-01-09	--	74.69	124.00	
		84-02-13	--	74.28	124.00	
		84-03-12	--	74.11	124.00	
		84-04-09	--	73.76	124.00	
		84-05-14	--	71.86	124.00	
		84-06-11	--	73.81	124.00	
		84-07-02	--	74.30	124.00	
		84-09-17	--	74.82	124.00	
303642087232301	USGS TH12-N.OF MUSCOGEE	83-10-03	--	81.41	118.00	120NFSG
		83-11-14	--	81.37	118.00	
		83-12-05	--	81.17	118.00	
		84-01-09	--	81.15	118.00	
		84-02-13	--	79.80	118.00	
		84-03-12	--	80.71	118.00	
		84-04-09	--	80.66	118.00	
		84-05-14	--	80.40	118.00	
		84-06-11	--	80.42	118.00	
		84-07-02	--	80.76	118.00	
		84-09-17	--	80.95	118.00	
303659087222001	USGS TH16-FARM HILL S-97	83-10-03	--	87.58	138.00	120NFSG
		83-11-14	--	87.90	138.00	
		83-12-05	--	87.76	138.00	
		84-01-09	--	87.31	138.00	
		84-02-13	--	86.95	138.00	
		84-03-12	--	86.73	138.00	
		84-04-09	--	86.43	138.00	
		84-05-14	--	86.99	138.00	
		84-06-11	--	87.35	138.00	
		84-07-02	--	86.54	138.00	
		84-09-17	--	87.56	138.00	
303723087182601	USGS TH28 EDEN RD	83-10-03	--	47.32	74.00	120NFSG
		83-11-14	--	46.59	74.00	
		83-12-05	--	46.89	74.00	
		84-01-09	--	46.86	74.00	
		84-02-13	--	46.01	74.00	
		84-03-12	--	46.23	74.00	
		84-04-09	--	46.22	74.00	
		84-05-14	--	46.41	74.00	
		84-06-11	--	46.21	74.00	
		84-07-02	--	46.93	74.00	
		84-09-17	--	46.75	74.00	
303958087233201	USGS TH13-S.CHRCHSE BR.	83-10-13	61.16	90.84	152.00	120NFSG
		83-11-16	60.96	91.04	152.00	
		84-01-12	61.46	90.54	152.00	
		84-05-02	62.05	89.95	152.00	
		84-06-27	61.45	90.55	152.00	
		84-08-22	61.77	90.23	152.00	
304008087211601	USGS TH27-4.5MI.N.CNTNMNT	83-10-03	--	116.15	156.00	120NFSG
		83-11-14	--	116.45	156.00	
		83-12-05	--	116.21	156.00	
		84-01-09	--	116.91	156.00	
		84-02-13	--	115.54	156.00	
		84-03-12	--	115.33	156.00	
		84-04-09	--	115.14	156.00	
		84-05-14	--	115.36	156.00	
		84-06-11	--	115.67	156.00	
		84-07-02	--	115.90	156.00	
		84-09-17	--	116.03	156.00	

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MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 1983 TO SEPTEMBER 1984

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEV-ATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEO-LOGIC UNIT
	FRANKLIN					
295046084394301	FRANKLIN NO 10	83-12-01	4.35	0.71	5.10	120FLRD
		84-01-17	2.49	2.57	5.10	
		84-05-14	2.64	2.42	5.10	
295732084430701	FRANKLIN 41	83-12-01	14.06	-4.05	10.00	120FLRD
		84-05-14	13.97	-3.96	10.00	
	GADSDEN					
304056084502501	CITY OF CHATTAHOOCHEE ABAND WELL NR CHATTAHOOCHE	83-11-14	59.13	58.87	118.00	120FLRD
		84-05-07	60.84	57.16	118.00	
	GULF					
300338085204201	FICO FARMS OBS. WELL(600) NR. OVERSTREET FL.	83-11-16	20.17	4.83		120FLRD
		84-05-11	-11.97	36.97		
	HOLMES					
304626085410301	KINGDOM HALL AT BONIFAY FL	84-05-07	108.56	20.44	129.00	120FLRD
305119085561901	LOCAL NO.051-556-1	83-11-29	79.89	205.79	286.00	120FLRD
		84-05-07	78.40	207.28	286.00	
305828085350901	HOLMES 7 BUSH	84-05-07	160.40	13.88	174.00	120FLRD
	JACKSON					
304747085223401	CITY OF COTTONDALE	83-11-30	110.40	22.60	133.00	120FLRD
		84-05-07	113.22	19.78	133.00	
304918084565601	NORTH OF SNEADS	83-11-14	87.97	22.03	110.00	120FLRD
		84-05-07	89.98	20.02	110.00	
304918085124201	RETTIG N. OF MARIANNA	83-11-30	78.29	21.71	100.00	120FLRD
		84-05-17	76.95	23.05	100.00	
305353085273101	LOCAL NO. 053-527-1	83-11-30	121.01	73.58	195.00	120FLRD
		84-05-07	121.25	73.34	195.00	
305844085035401	LOCAL NO.058-503-1	83-11-14	105.51	28.18	134.00	120FLRD
		84-05-07	119.08	14.61	134.00	
305947085243001	WELCOME STAT. N OF CAMBELLTON	83-11-30	136.30	15.70	152.00	120FLRD
		84-05-07	139.00	13.00	152.00	
	JEPPERSON					
303001083553401	JOSEPH BELLEMY	83-11-02	35.50	139.50	175.00	120FLRD
		83-12-29	37.06	137.94	175.00	
		84-02-27	39.71	135.29	175.00	
		84-05-24	41.79	133.21	175.00	
		84-06-27	39.52	135.48	175.00	
		84-08-21	39.72	135.28	175.00	
	LEON					
301801084144501	ROY WHITTINGTON WELL NR WOODVILLE,FL	83-11-30	8.48	25.52	34.00	120FLRD
		84-05-17	9.26	24.74	34.00	
302518084192401	LOCAL NO.025-419-441	83-11-30	23.46	66.40	89.90	120FLRD
		84-05-17	30.41	59.45	89.90	
303447084072401	LOCAL NO.034-407-1	83-11-04	52.97	169.73	223.00	120FLRD
		84-05-30	60.93	161.77	223.00	
	LEVY					
291004082382901	91023801 15S16E24 910238433 DIXIE LIME PR	84-05-15	29.55	--	29.20	120FLRD
		84-09-11	29.40	--	29.20	
291048083011801	15S13E17 910301212	84-05-15	0.63	--	8.40	120FLRD
		84-09-12	0.56	--	8.40	
291508082432901	GULF HAMMOCK	84-05-15	9.60	--	13.20	120FLRD
		84-09-12	9.62	--	13.20	

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STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEV-ATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEO-LOGIC UNIT
	LEVY					
291712082351801	SOUTH OF BONSON-RO	84-05-15	52.62	--	103.00	120FLRD
		84-09-11	52.45	--	103.00	
291806082545601	918254331 13S14E33 TEST 2 USGS	84-05-15	19.87	--	24.00	120FLRD
		84-09-12	18.61	--	24.00	
292310082373701	ERCELL SMITH	84-05-15	56.10	--	61.40	120FLRD
		84-09-11	56.19	--	61.40	
292507082560201	AJ MIMS	84-05-22	12.00	--	33.00	120FLRD
		84-09-12	12.87	--	33.00	
292640082381201	92623801 12S17E17 926238241 HARDEE HOTEL	84-05-15	55.34	--	69.00	120FLRD
		84-09-11	55.48	--	69.00	
292916082435501	CB GARNER	84-05-22	46.26	--	53.00	120FLRD
		84-09-12	46.49	--	53.00	
	LIBERTY					
300152084592701	LOCAL NO.001-459-1	83-11-14	23.51	5.99	29.50	120FLRD
		84-05-10	23.44	6.06	29.50	
300813084555701	PLACID OIL CO SUPPLY WELL	83-11-14	37.45	14.55	52.00	120FLRD
		84-05-15	37.88	14.12	52.00	
301035084403701	PORTER LAKE REC AREA	83-11-30	32.97	-10.70	22.30	120FLRD
		84-05-25	32.17	-9.90	22.30	
302823084560601	ST. JOE PAPER CO. WELL N. OF BRISTOL,FLA.	83-11-14	127.65	86.85	214.00	120FLRD
		84-05-10	129.68	84.82	214.00	
	OKALOOSA					
303745086442101	B-6204 EGLIN 31	84-05-16	21.84	113.26	135.00	120FLRD
304518086334001	CRESTVIEW NO 4	84-05-16	58.57	171.43	230.00	120FLRD
304801086403101	BAKER NO 1	84-05-08	71.02	173.98	245.00	120FLRD
305530086322701	W.D.FLOURNOY JR. WELL	83-11-18	155.59	23.41	179.00	120FLRD
		84-05-03	157.31	21.69	179.00	
305615086284801	FLA FOR.SER. LAUREL HILL	83-11-18	171.75	118.25	290.00	120FLRD
		84-05-03	173.97	116.03	290.00	
	UNION					
300101082245201	LOCAL NO.001-224-1	84-04-26	62.24	--	152.00	120FLRD
300615082130501	RAIFORD	84-04-26	63.85	--	149.00	120FLRD
	WAKULLA					
300540084174001	WAKULLA 19	83-11-30	7.79	1.20	9.00	120FLRD
		84-05-16	6.15	2.84	9.00	
300917084121301	LOCAL NO.2 ST. MARKS	83-11-30	2.39	1.36	3.80	120FLRD
		84-05-17	1.70	2.05	3.80	
301115084241201	ARRAN WORK CENTER	83-11-30	30.07	4.93	35.00	120FLRD
		84-05-16	29.42	5.58	35.00	
301156084103501	LOCAL NO.011-410-1	83-11-30	6.41	0.55	7.00	120FLRD
		84-05-17	5.92	1.04	7.00	

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MISCELLANEOUS WATER LEVEL MEASUREMENTS
OCTOBER 1983 TO SEPTEMBER 1984

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEV-ATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEO-LOGIC UNIT
	WALTON					
303053086075301	J M THOMPSON WELL	83-11-22	18.26	41.53	59.80	120FLRD
		84-05-14	16.16	43.63	59.80	
303434086130301	B-8631 EGLIN AFB	84-05-16	32.15	108.39	141.00	120FLRD
303454085560601	WELL 43	83-11-29	35.60	140.40	176.00	120FLRD
		84-05-14	24.40	151.60	176.00	
304334086032401	ARGYLE TOWER FFS	84-05-09	86.81	174.19	261.00	120FLRD
304358086120801	BSA CAMP LK EUCHEE WELL	83-11-23	122.20	151.80	274.00	120FLRD
		84-05-16	124.40	149.60	274.00	
305043086083301	RAY PETER WELL	83-11-18	182.13	96.87	279.00	120FLRD
		84-05-03	186.63	92.37	279.00	
305110086164801	C GEOGHAGAN WELL	83-11-18	172.61	82.39	255.00	120FLRD
		84-05-03	173.62	81.38	255.00	
305247086030901	WELL 52	83-11-29	121.47	183.30	305.00	120FLRD
		84-05-07	120.13	184.64	305.00	
305359086122601	JACKSON STILL TOWER	83-11-18	190.94	69.06	260.00	120FLRD
		84-05-03	192.84	67.16	260.00	
305804086180901	FLA WELCOME STA PAXTON	83-11-18	214.39	109.61	324.00	120FLRD
		84-05-03	215.46	108.54	324.00	
	WASHINGTON					
304441085331101	I-10/SR77 S OF CHIPLEY	83-11-17	63.00	60.00	123.00	120FLRD
		84-05-09	60.38	62.62	123.00	

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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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